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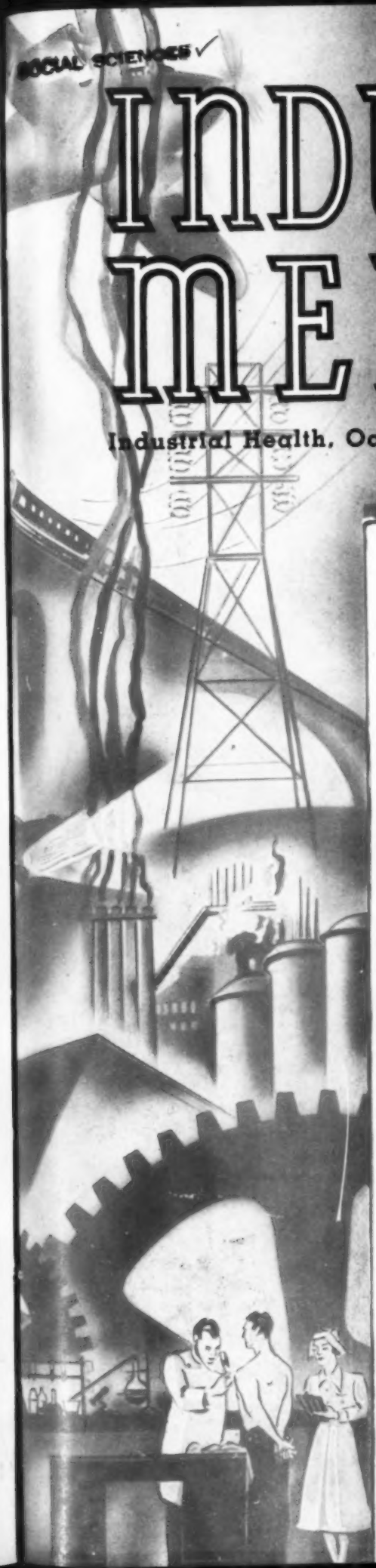

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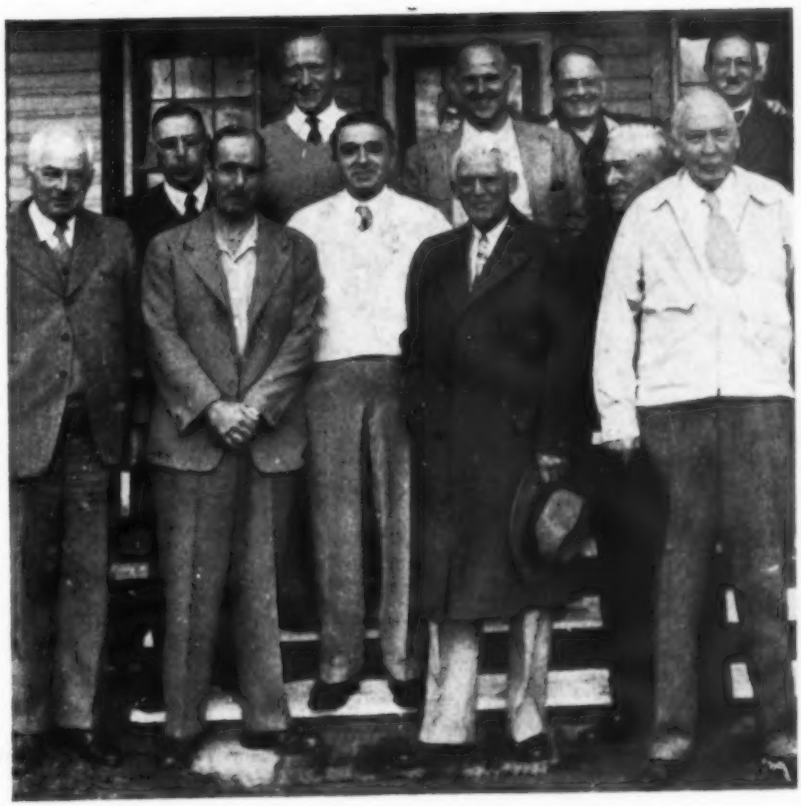

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Volume 16 Number 11

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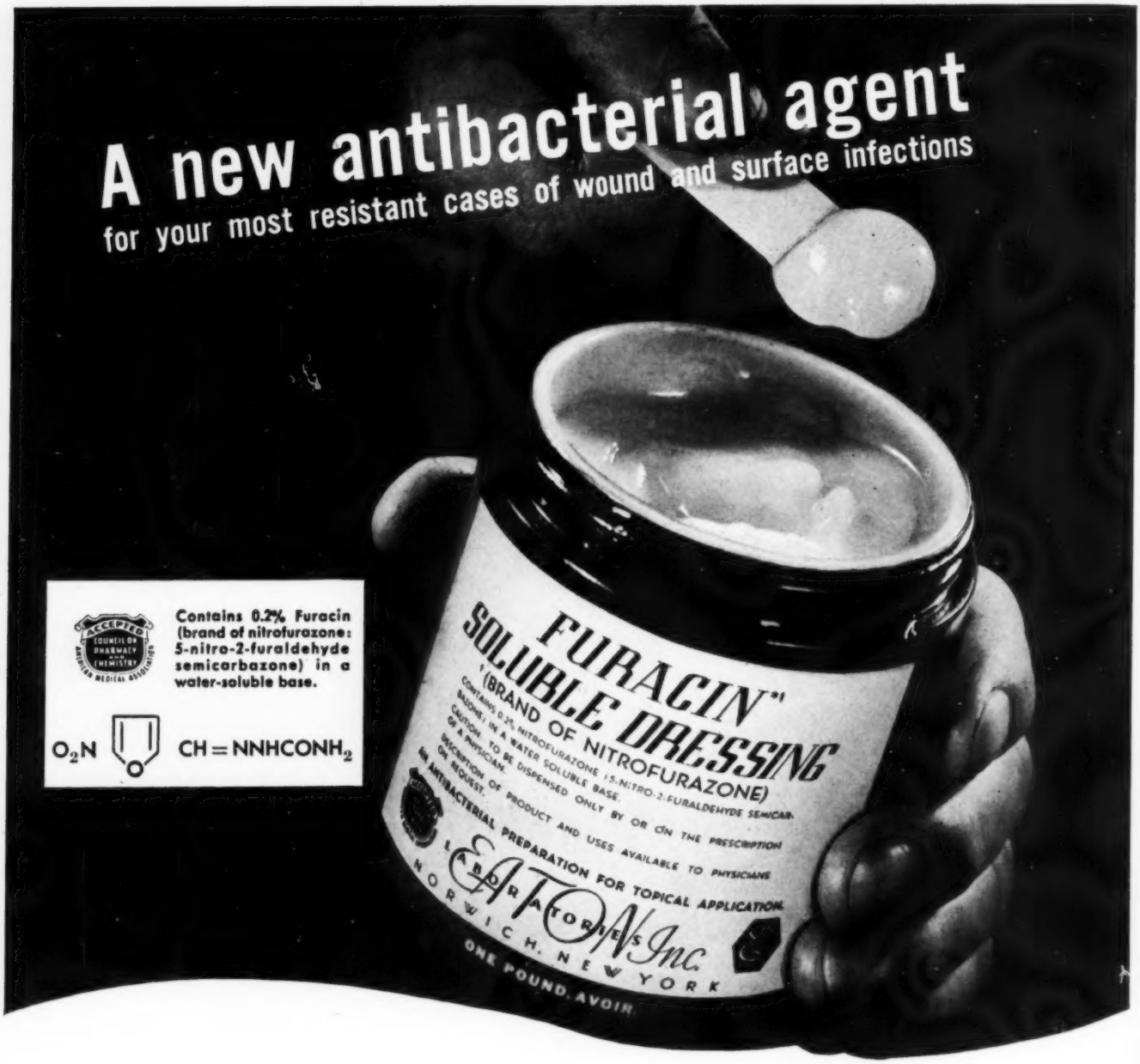
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1. Snyder, M., Kiehn, C. and Christopherson, J.: Effectiveness of a Nitrofuran in the Treatment of Infected Wounds, Mil. Surg. *97*:380, 1945. **2.** McCullough, N.: Treatment of Infected War Wounds with a Nitrofuran, Indust. Med. *16*:128, 1947.

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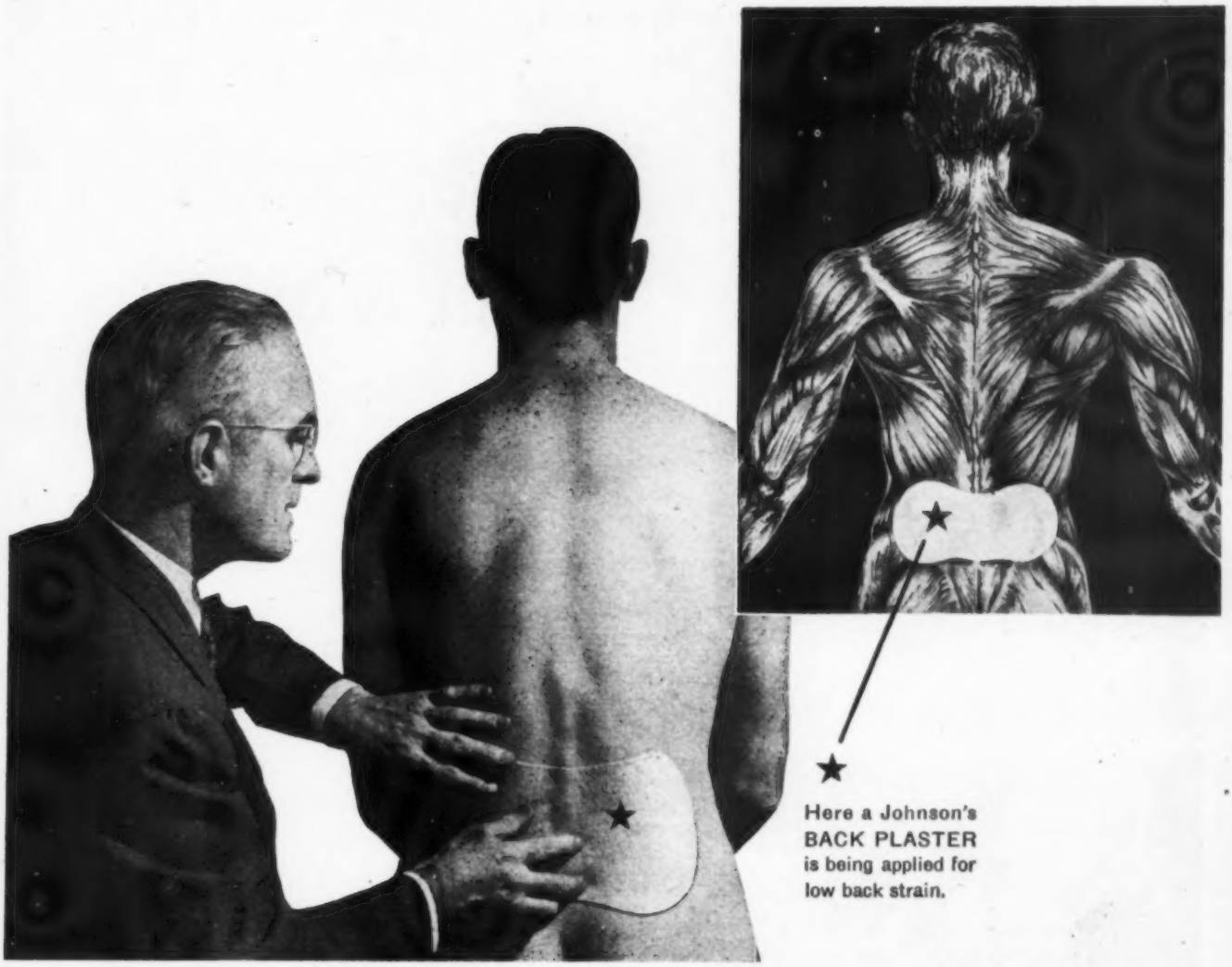

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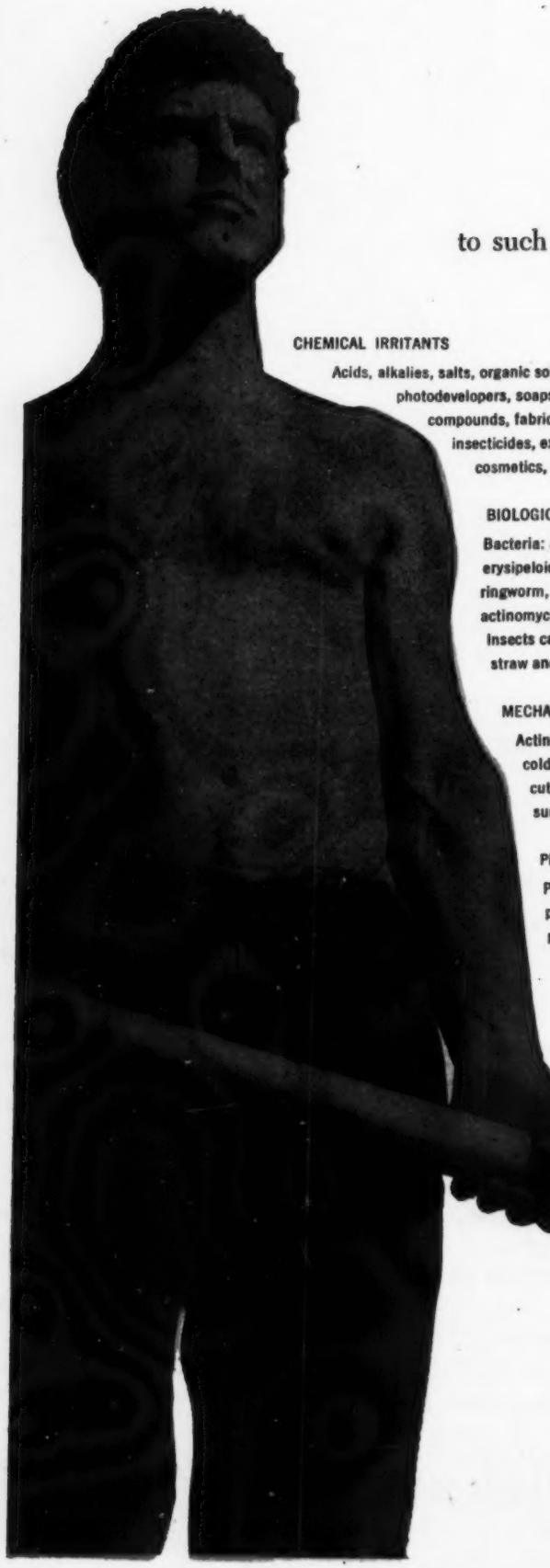

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Industrial Medicine | Volume 16 | NOVEMBER, 1947 | Number 11 | Industrial Medicine

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The AMERICAN ASSOCIATION OF INDUSTRIAL PHYSICIANS AND SURGEONS will hold its 33rd Annual Meeting at Hotel Statler, Boston, Massachusetts, during and throughout the week beginning Monday, March 29, 1948. Participating in the Industrial Health Conference will be the AMERICAN ASSOCIATION OF INDUSTRIAL NURSES, the AMERICAN INDUSTRIAL HYGIENE ASSOCIATION, the AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS, and the AMERICAN ASSOCIATION OF INDUSTRIAL DENTISTS.

[NOTE: The opinions expressed in the editorials of this Journal are not to be considered as necessarily representing the opinions of any associated organizations.]

EVEN the scientists have their informal moments — *vide* the front cover. The RAMAZZINI Society members and guests are (left to right) DR. ROBERT T. LEGGE; DR. ANDREW R. RIDDELL; DR. STUART F. MEEK; DR. OSCAR A. SANDER; DR. FRANK FERLAINO; DR. CLARENCE D. SELBY; DR. CARL M. PETERSON; DR. C. O. SAPPINGTON; DR. WILLIAM D. MCNALLY; DR. CAREY P. MCCORD; and DR. LEONARD GREENBURGH. See page 534 for a note on the Saranac Lake "rendezvous," and page 535 for the Ramazzini Oration by DR. MCCORD. . . . IN DR. FELTON'S article, "Orienting the New Employee in the Services of the Health Department" (page 519), Fig. 23 (on page 523) is a striking picture of "the happy man." It portrays the kind of security which seems to be the really ultimate goal of so many people. There may, however, be an element of danger in holding this complete security up to the employee in any manner which might lead him to conclude that it is the goal of his company's health service. So many of the elements of security lie within the individual himself and are matters which can be kept satisfactory to him by no other person or agency—for neither employment nor politics, objectively, can supply whatever is missing subjectively. We have the feeling that, while top management will view with a certain satisfaction the man for whom this Fig. 23 represents the ultimate, they are nevertheless eagerly looking for the man in their employ who will add his own No. 8 to the seven elements of security there depicted. This No. 8 will be expressive of a certain *un*satisfaction (not *dis*satisfaction) with the first and the last of the seven, i.e., his job and himself. The kind of security that means the end of striving is merely vegetation; executives are alert for the man who is aware that his title deed to security also mentions *ambition*. . . .

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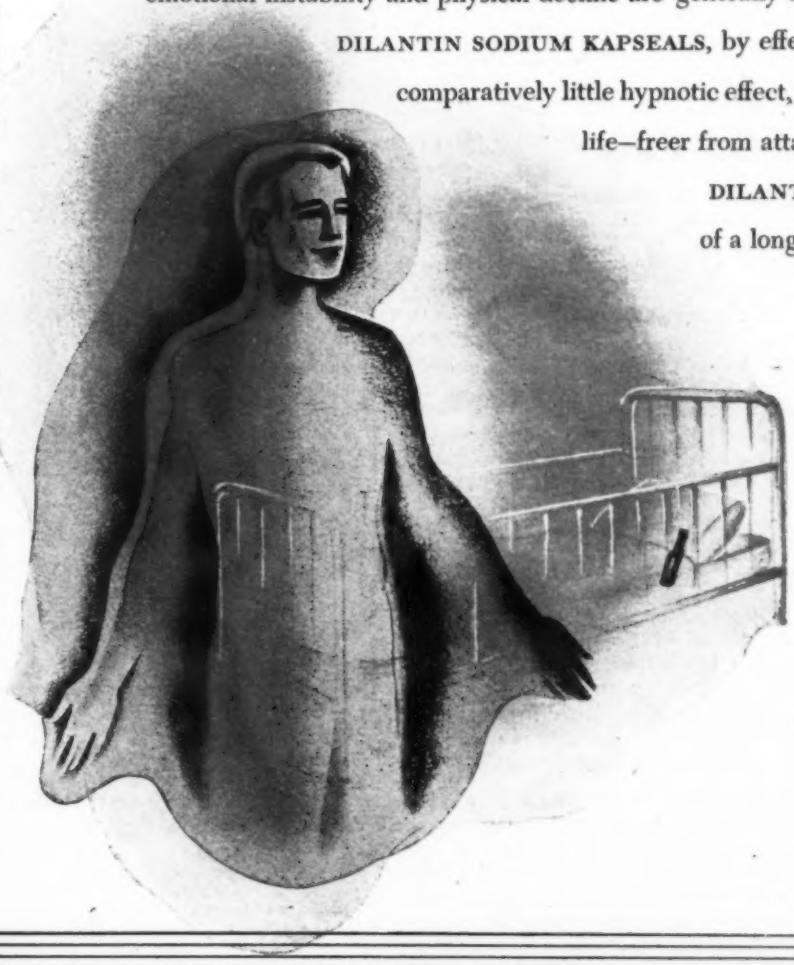

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ASSOCIATION NEWS

DR. L. HOLLAND WHITNEY has now returned as Medical Director of Sperry-Gyroscope Company at Great Neck, Long Island, New York.

DR. OKEY S. SOMERVILLE, Medical Director, Phillips Petroleum Company, of Bartlesville, Oklahoma, has retired. He has been a member of A.A.I.P. & S. for over 10 years and a Fellow since April 11, 1941.

DR. DOUGLAS R. WARREN, is now a full-time physician in Industry as Medical Superintendent of Sarnia Refinery, Imperial Oil Ltd., Sarnia, Ontario, Canada.

DR. R. G. BIRRELL has been appointed Medical Director, Imperial Oil Ltd. (Canada), with head offices at 56 Church Street, Toronto 1, Ontario, Canada. He was formerly at Elizabeth, New Jersey, with the Standard Oil Company of New Jersey. DR. GORDON A. SINCLAIR has been appointed "Associate Medical Director," Imperial Oil Ltd., at the same address. DR. SINCLAIR was formerly a Brigadier with the Canadian Army and was in private practice before the war at Grimsby, Ontario.

WE HAD an interesting note the other day from our long time member, fellow and good friend DR. HERBERT L. DAVIS, whose address is 900 Schofield Building, E. 9th and Euclid Aves., Cleveland, Ohio. He is gradually easing down on his work and believes that he should carry on some activity and retire in rather than from business.

DR. ROBERT W. BUTLER has now returned as plant physician to the Arlington Mills Division of the William Whitman Company, Inc., at 500 Broadway, Lawrence, Massachusetts. He graduated at Tufts Medical School 1930, and was formerly associated with this plant prior to his war service and experiences with the Navy part of the time in the Medical Department of United States Navy Yard, Washington, D. C. His pre-Naval industrial experience was an excellent ground work for his war service.

CAPT. O. L. BURTON, M.C. U. S. Navy, Chief, Preventive Medicine Division, Bureau of Medicine, and Surgery, Navy Department, Washington 25, D. C., informs us he intends to remain in the regular Navy. He has enjoyed and will continue his membership in the A.A.I.P. & S.

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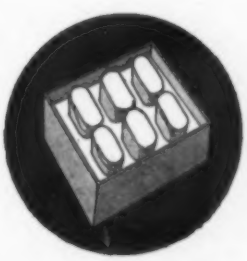

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ON OCTOBER 27 DR. LEONARD ARLING visited the Association Offices. He is seeking information and program material for a full day's Institute of Occupational Medicine and we were pleased to submit considerable material for his consideration. The Minnesota-Michigan football game may have been only one of the inducements for DR. and MRS. ARLING to visit their many Michigan friends. He reports an interesting stop with DR. KEENE, Medical Director of Kaiser-Frazer Company plant at Willow Run.

DR. FREDERICK OETJEN, Director from Jacksonville, Florida, attended the Congress of International College of Surgeons meeting held in Chicago September 29 to October 4. He has returned to a very active industrial surgical practice in Jacksonville since his discharge from the Army, in which he served as a Lieutenant-Colonel in charge of surgery in various hospitals in this country. His visit to the Association offices reveals his diversified interests in the specialty field and his keen desire to aid in the development of a strong regional component society in the southeastern section of the United States. He hopes that many of our officers, directors and Association members will be able to attend these meetings, enjoy their fellowship and hospitality, but also to aid in bringing our experiences in industrial medicine to the physicians and surgeons in that area where so many are vitally interested in this specialty.

DR. VOLNEY S. CHENEY, Medical Director of Armour & Company for the past 32 years, has retired and will make his future home at 817 Seventh Avenue, Las Vegas, New Mexico. The employees at the Armour Plant as a token of their esteem and appreciation gave DR. CHENEY a beautiful trailer to aid him in his wandering about the country. No more worries for DR. and MRS. CHENEY as to where they will find suitable quarters for the night. He hopes that many of his friends will call on him if and when any of them happen to be near Las Vegas, New Mexico. (Remember New Mexico not Nevada.) The latchstring will always be out and the trailer is to be parked in the yard for guests. The Board of Directors of A.A.I.P. & S. have elected DR. CHENEY to Honorary Membership at their meeting October 12, 1947. Good luck and much happiness to you VOLNEY!

DR. G. R. HARGREAVES, Medical Director of Lever Brothers, and Unilever Ltd., London, England, is visiting the United States and Canada, inspecting the medical departments of his company's various plants throughout the country, and renewing acquaintances with the many friends he made while stationed on the West coast for a considerable period during the late war.

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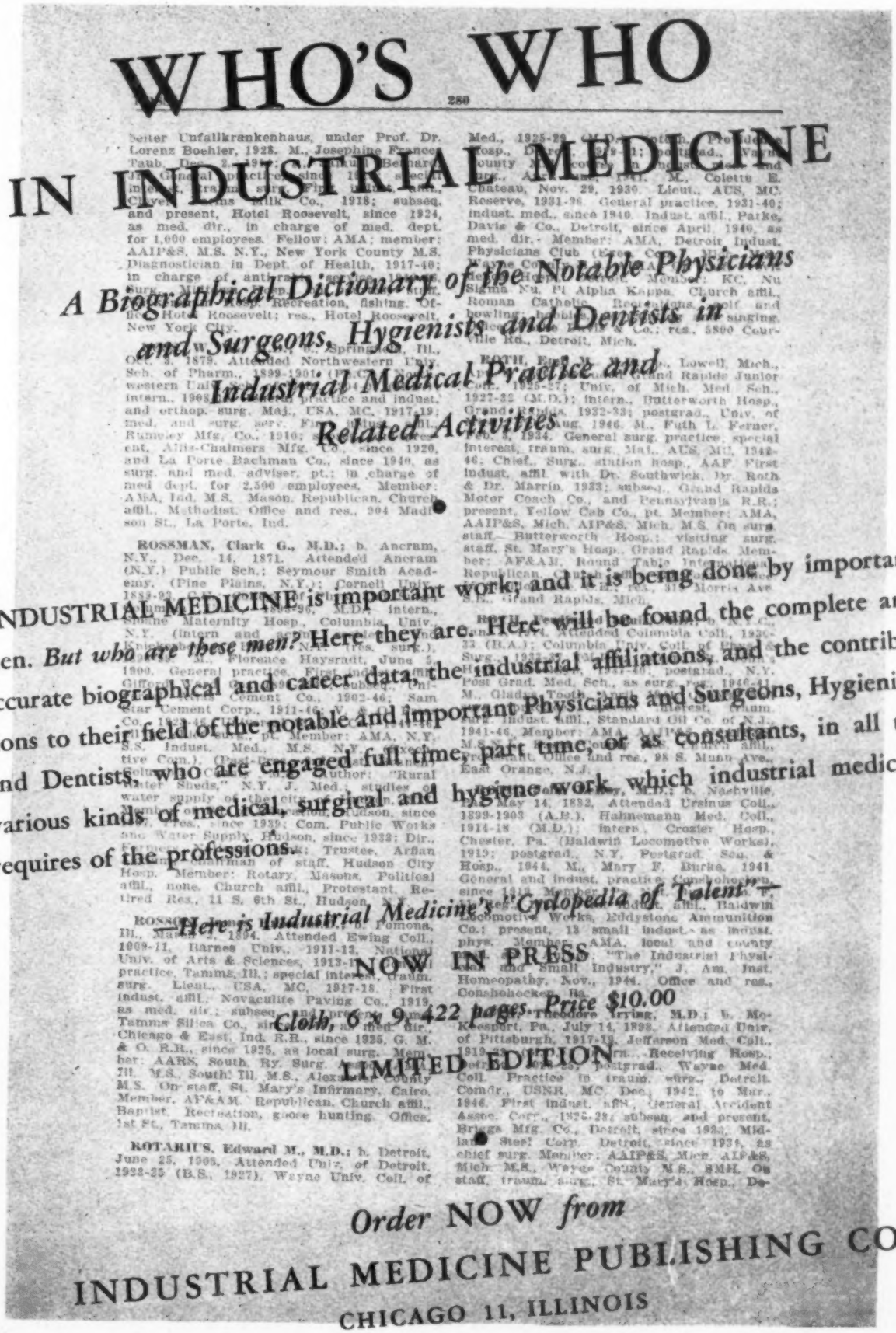
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Visit of Dr. Robert T. Legge

ON OCTOBER 8, 1947, DR. ROBERT T. LEGGE, 6 Roble Road, Berkeley, California, paid a much appreciated visit to the Association offices. He was keenly interested in many of our historic documents in connection with the development of the A.A.I.P. & S. The copies of programs from the 1st Annual Meeting in 1916 are nearly all complete to date. The names of men on these programs were all known to DR. LEGGE and brought back many pleasant memories and experiences. The transactions in those days were published in booklet form and offer excellent reading on the subject of Industrial Medicine and Traumatic Surgery. One item in the transaction of the A.A.I.P. & S. 4th Annual Meeting in Atlantic City, June 9, 1919, thrilled him. On page 90 DR. ROBERT B. OSGOOD in discussing back strain stated "CASES ARE ON RECORD OF THE RUPTURE OF THE INTERVERTEBAL DISC WITH THE PROTRUSION OF THE CORPUS SPONGIOSUM CAUSING AN ACTUAL PRESSURE ON THE CAUDA EQUINA." There is much similar interesting reading in these transactions for those who now have time to peruse them. Another interesting experience of DR. LEGGE was mentioned when we asked him how he became interested in industrial medicine. He then informed us that he started his career in industrial medicine as a surgeon, plant physician and later Medical Director for one of the large logging and lumber companies on the west coast. This industrial work occupied 15 years of his earlier physician life. So DR. LEGGE, just like many other leaders and authorities on industrial medicine, started out actually doing the

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Certification

AN ESSENTIAL step towards Certification was made when the Council on Medical Education and Hospitals of the A.M.A. at the A.M.A. convention in Atlantic City approved the plan for graduate training in Occupational Medicine which had been prepared by the joint committee of the A.M.A. and the A.A.I.P. & S. This graduate training program includes both training in hospitals, medical schools, industrial hygiene laboratories, and in-plant training. The A.M.A. is now preparing a suitable questionnaire for use by hospitals and plants in furnishing data as to the training facilities available. It is felt that this will expedite the development of the Fellowship program. Fellows in Occupational Medicine are now receiving training at the University of Pittsburgh Medical School, the University of Cincinnati, and with similar plans in the process of development in other schools, such as New York University, University of California, and the Bowman-Gray School of Medicine of Wake Forest College. Meanwhile, a tentative list of Founders is in the process of preparation. The joint committee on Certification of the A.M.A. and the A.A.I.P. & S. appears to hold the belief, now that the graduate training program has been approved, that Certification should become a reality after this training program has become sufficiently developed in a representative number of medical schools and industrial plants.

GENERAL

J. BRENNAN GISCLARD has resigned as Associate Industrial Hygienist with the Detroit Bureau of Industrial Hygiene, Detroit Department of Health, to accept a position as Industrial Hygienist with the American Cyanamid Company, New York.

SERVICES and facilities of the Michigan Department of Health were brought by the Bureau of Industrial Health to more than 400,000 residents of the state in more than 650 industrial plants in the year just past. More than 50,000 of these, mostly heads of families, came into direct contact with the work of the Bureau and staff members. During the year industry spent more than $2,000,000 to comply with the Bureau's engineering recommendations to alleviate existing or potential sources of injury to health and welfare.

—*Michigan Public Health*, August, 1947.

MINERS are strictly forbidden to smoke or carry matches in British coal mines, yet 47 deaths were caused in a single year by the breaking of this rule.

—*New Brunswick Home News*, September 25, 1947.

Atomic Radiations Unit

FORMATION of an Atomic Radiations Unit in the Chemical Section of the Industrial Hygiene Division, U.S.P.H.S., was announced by DR. J. G. TOWNSEND, Chief of the Division. DUNCAN HOLADAY, Engineer (R), is in charge of the new Unit. The new Unit will advise and assist state industrial hygiene units in detecting and evaluating health hazards produced by the use of radioactive isotopes and high energy machines such as x-ray machines and betatrons.

—*New Orleans M. & S. J.*, September, 1947.

Congress on Industrial Health

THE Council on Industrial Health (A.M.A.) will hold its Eight Annual Congress on Industrial Health in the Cleveland Auditorium, Cleveland, on January 5 and 6, 1948. These dates immediately precede the In-

terim Session of the American Medical Association, which will be held in the Auditorium on January 7 and 8. General practitioners supply a large part of the medical services which workers receive through industry, and they are cordially invited to attend these industrial health sessions. The program of the Congress is being constructed with general practitioners in mind and will include discussions of first aid and emergency services in industry, physical examinations, administrative practices, applied physiology, aviation medicine, radiation medicine and practical expositions of occupational disease management, traumatic surgery and rehabilitation. Since full use of medical services in industry depends on support from management and the worker, the essential relationships will be discussed. Industry needs medicine as a practical ally and to promote human relations. The Industrial Health Congresses are intended to further these objectives. The sessions are open to representatives of all groups allied with the medical profession in the promotion of industrial health.

—*J. A. M. A.*, October 11, 1947.

Industrial Hospital

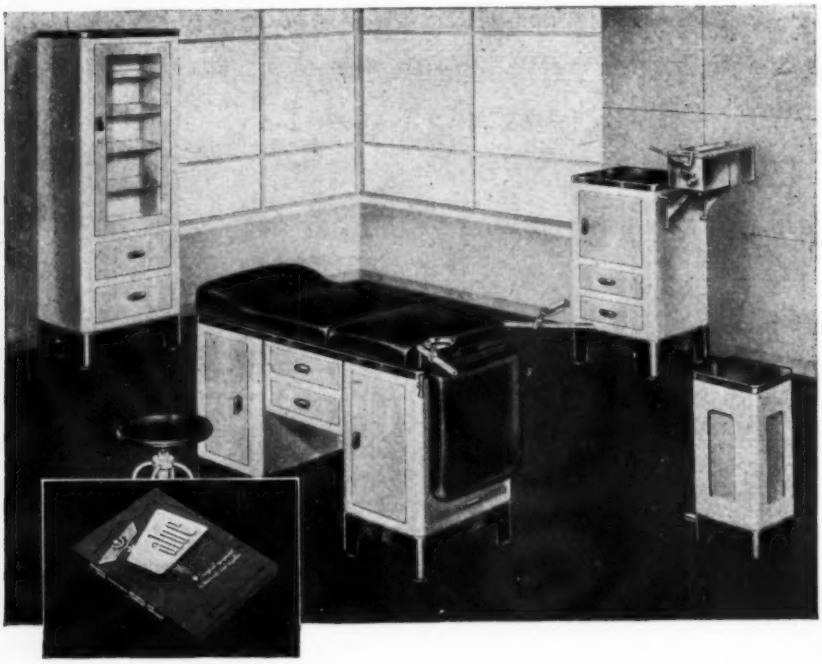
FOLLOWING three years of planning and delay due to war-time restrictions and material shortages, an industrial hospital for Angelina county (Texas) is expected to go under construction shortly after October 14. The institution, to be known as Memorial hospital, will be maintained by the Angelina County Lumber company, Keltys; Texas Foundries, Inc., Lufkin; Lufkin Foundry and Machine company, Lufkin, and Southland Paper Mills, Inc., Herty. Memorial hospital will be a non-profit organization and will be reserved for use by employees of the four industries and their families. Bids have been called and are to be opened at Samuel Gee and William Weiner architectural firm in Shreveport, Louisiana. Construction is expected to get under way immediately. The idea of an industrial hospital for this area was conceived by officials of the four industries late in 1944. During the delay on construction, a six-acre tract has been purchased, within the city limits on highway 94 west at a site familiarly known as the "old Kessi place." The hospital will be modern and fully equipped; the structure will be of brick, concrete and steel and will have a capacity of 50 beds. Plans have been arranged to double the bed capacity in future. The addition of the hospital is expected to alleviate the overcrowded conditions currently prevalent at the Angelina county hospital here.

—*Houston, Texas, Post*, September 28, 1947.

Beryllium Granulomatosis

BERYLLIUM granulomatosis is a new industrial disease of great potential importance. The metal is used in a large number of processes and industries throughout the world. Known or unrecognized cases may appear in the offices of Arizona internists and dermatologists at any time. The causative agent apparently is some compound of beryllium, but its action is not undehstood, its relationship to a bizarre and sometimes concomitant diphtheroid bacillus is unknown, and animal experiments have been fruitless. The pathology and clinical picture are quite standardized, and they are quite different from an acute, transient lesion which beryllium can also cause. The x-ray findings are similar to the pneumoconioses, to other sarcoids, and to certain forms of tuberculosis. A case has been reported which parallels the small number of chronic cases recorded during the past nine months, both in diagnostic feature and progress. The diphtheroids have not been found in the sputum, but a skin-biopsy has been positive. A serious, irritative, cardiovasculo-renal condition with hypertension has been present which, though not previously described, has occurred synchronously with the exposure to beryllium and the development of the granulomatous lesion. All cases of sarcoidosis should be investigated from the standpoint of occupational history. Certain methods of treatment remain to be given a more adequate trial, but the only reliance at present should be on prevention. Beryllium compounds must be handled as potentially dangerous materials.

—*Arizona Medicine*, September, 1947.



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The Social Insurance Swindle

IN A STUDY made for the National Industrial Conference Board, DR. WALTER SULZBACH warns against the tendency of a social insurance bureaucracy to expand its system beyond the scope originally planned for it; the vested interests of the bureaucracy itself make the bureaucrats "imperialists for their particular departments." DR. SULZBACH doesn't say so, but the process seems to us much like a cancerous growth. All of which is favored by a fault of the people themselves; having seen billions melt away under wasteful government they have lost their sense for figures and generally lack comprehension of the consequences involved in thriftlessness and reckless budgeting.

—*Medical Times*, October, 1947.

"Blue Haloes"

IN "Blue Haloes" in Atebrin Workers, IDA MANN (*British Journal of Ophthalmology Ltd.*, 24-27 Thayer Street, London, W. 1, England) describes a new industrial disease found among atebrin workers. It is a disease of the cornea, apparently caused by an intracellular deposit of an insoluble derivative of atebrin. The symptom is the patient's seeing blue haloes around lights. Prognosis is excellent when the patient is removed from contact with atebrin dust. The author concludes, "The investigation of this new industrial disease is chiefly of interest from the physicochemical diagnosis of glaucoma which its history suggests."

—*The Sight-Saving Review*, Summer, 1947.

Radio-active Materials

IN KEEPING with its responsibility of increasing control of occupational disease hazards, industrial toxicology is now centering major study on the use of radio-active materials in manufacturing, DR. A. G. CRANCH, Director of the Toxicological Department of Union Carbide & Carbon Corporation, told *Health on the Job* recently. Emphasizing the importance of toxicology in any plant medical program, DR. CRANCH was quick to point out that it is absolutely necessary for the present-day manufacturer to know the toxin qualities of his products before actual marketing. "It is just as important as plant safety devices," he said. "The industrial toxicologist formerly had few problems. Until the advent of the synthetic chemicals, he was concerned primarily with the study of a few solvents, dust hazards, and the toxic properties of some metals. Following synthetic chemicals came plastics, and now he is concerned with the use of radio-active materials. Immense precautions are necessary in all research problems because the field is practically unexplored." Veteran of 41 years in medical practice, mostly in industry, with special emphasis on toxicology, DR. CRANCH also acts as medical consultant to his corporation, in addition to heading a staff of 25 persons in the toxicological laboratory. "Although the larger corporations are in the enviable position of being able to maintain their own laboratories," he said, "the smaller corporations and businesses are now taking their problems to educational institutions, such as the Institute of Industrial Medicine of the New York University College of Medicine, which are equipped to answer their problems at not too great an expense."

—*Health on the Job*, October, 1947; New York University-Bellevue Medical Center.

Kills Flies

WALLPAPER that kills flies that try to roost on it, and wrapping paper that will do the same thing to any insect nosy enough to investigate your groceries are among the newest things in DDT anti-insect tactics. Samples of such paper have been received for testing by the Bureau of Entomology and Plant Quarantine in Washington. The tests, however, will be conducted in the

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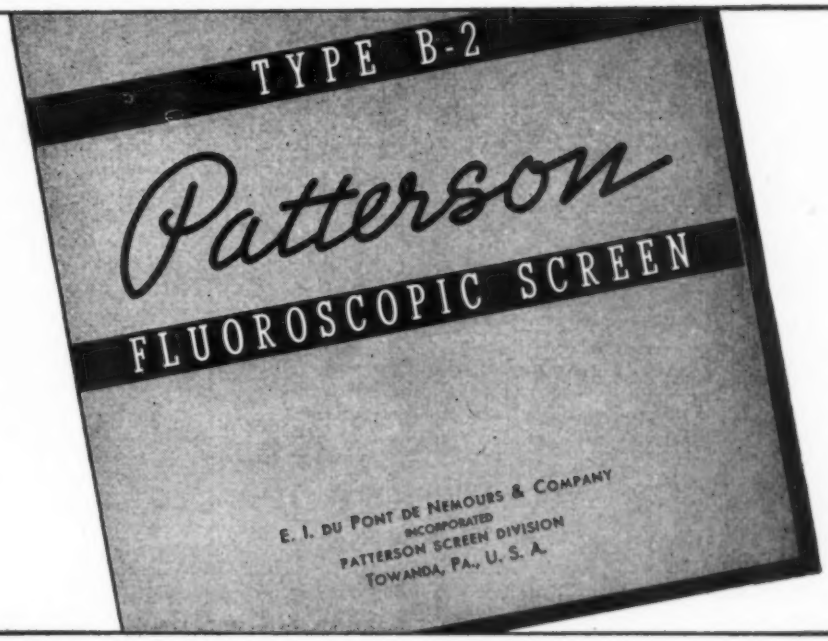
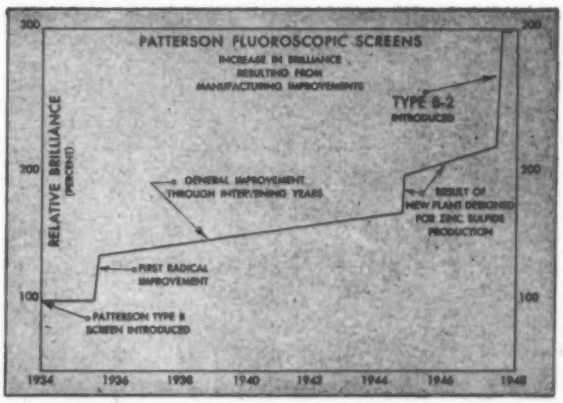


TYPE B-2 is a new Patterson Fluoroscopic Screen that gives you 40% more brilliance than the present Type B Screen. It permits a more accurate diagnosis in less time. The new Screen makes use of a radically improved luminescent chemical and marks still another milestone of Patterson progress in the development of diagnostic tools for the roentgenologist.

The extra sensitivity of the new Type B-2 Screen allows utilization of greater brilliance at customary levels of x-ray energy, or a reduction of energy when the former degree of brilliance is maintained. The Screen gives absolute uniformity and stability to x-rays . . . has no objectionable after glow . . . and the increased brilliance does not alter contrast. In addition, there is greater visibility of detail, and the Screen is ideal for miniature radiographic work with green-sensitive film.

Complete information about this remarkable new improved Fluoroscopic Screen will be sent on request. Patterson Screen Division, E. I. du Pont de Nemours & Co. (Inc.), Towanda, Pa.



The graph above shows increased brilliance of the new Type B-2 Screen compared with that of the Type B. Note that the new Screen is three times as bright as the original Type B introduced in 1933.

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—Lippincott's *Digest of Treatment*, November, 1947.

Nurse Salaries

INSTITUTIONAL staff nurses in Pennsylvania have established minimum salary scales for nurses in this state, according to an announcement just made by the Pennsylvania State Nurses' Association. Salaries begin at $180 per month for general duty nurses, and are to be in effect by October 1. The Association points out that the salary and working standards have been set by nurses themselves as part of a statewide effort to alleviate the serious nursing shortage caused in a great part by more attractive salaries in other states and in other professions.

—*Pennsylvania Med. J.*, October, 1947.

Mental Trauma

PROBABLY no greater mental trauma is ever inflicted by a physician than when he first tells a patient that he or she has tuberculosis. The patient probably knows absolutely nothing about tuberculosis except that it is a dread disease. Material and social problems combined with the psychological problems of separation from family, complete change of living routine, sudden cessation of all activity, ignorance of the disease and what it will mean to him and an unknown future is apt to create in the patient a mental turmoil which is a known detriment to his eventual recovery and return to a useful life.

—C. J. STRINGER, M.D., in *Hospitals*, August, 1946, quoted in *J. Maine Medical Association*, August, 1947.

IF TRUMAN should be re-elected along with a New Deal Congress, the Wagner Bill will have better than a fifty-fifty chance of enactment," opines the Association of American Physicians and Surgeons. "A Republican President with a Republican Congress would secure passage of the Taft Bill. But if a Republican like Warren gets in and is supported by a New Deal Congress, look out! Nationalized medicine would be as good as in."

—*Medical Economics*, October, 1947.

No M. D. Union

WHEN physicians are particularly wroth about injustices to their profession, they talk about forming a union. However, such statements should not be taken too seriously. The vast majority of physicians in this country are not receptive to the unionization idea. Those who feel otherwise are not numerous enough to count. Views of the editor of *Philadelphia Medicine* on this subject, your observer believes, reflect the opinions of the majority. He writes in the February 22, 1947, issue of that publication: "Physicians have felt that their calling was somewhat akin to that of the clergy, the latter being concerned chiefly with things spiritual and we with things of the flesh and mind. Our duty, as we have seen it, is always to the individual, to alleviate his sufferings, to get him well, if possible, in the quickest time and always without regard to our own convenience or most desirable hours of work." Reference is then made by the editor to the report from England that physicians and nurses of two London hospitals were dismissed because they refused to comply with an order of the Willesden Borough Council to affiliate themselves with a trade union. According to a United Press dispatch, the Willesden Maternity Hospital found itself in a situation where only one doctor, the medical superintendent, was left to care for 100 patients. Commenting on this situation and the growth of the union movement in this country, he observes that the recent strike of school teachers indicates a trend, and suggests that what has happened in England may very well happen here. Your observer cannot conceive of such a shift in opinion among the medical profession of the United States. Although doctors have had their legitimate grievances, resorting to trade unionism certainly would not be the solution. If public ire were raised to a high pitch because of the coal strike and its effect upon the public welfare, how much greater would be the resentment if similar steps were taken by a doctors' union, regardless of the justice of their cause. Doctors would fall so rapidly in public estimation that years would be required to regain public confidence. Such a move is, therefore, not conceivable nor, in your observer's

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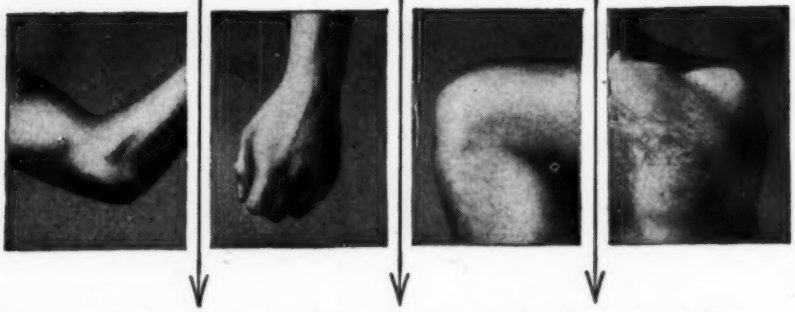

Beneficial effects may be exerted, not just locally but systemically, "beyond the reach of human fingers" in such conditions as arthritis, myositis, muscle sprains, bursitis and arthralgia. That systemic as well as local effects may be achieved by such preparations as Baume Bengué was conclusively demonstrated by the fundamental work of Moncorps, Kionka, Hanzlik, Brown and Scott.

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opinion, even possible. Physicians have too high a regard for their calling to jeopardize it by any such tactics.

—*Medical Annals of the District of Columbia*, April, 1947; in *Pennsylvania Med. J.*, October, 1947.

Control of Respiratory Diseases

INDUSTRIAL records indicate that acute respiratory diseases are the most important cause of sick-absenteeism. It is estimated that the working people of this country lose about one billion dollars annually in wages alone because of respiratory illness, while the loss to their employers must run into many millions. Hence, though people spend only one-third of their time at work, any measures industry can adopt for reducing respiratory infections are of importance. Extensive experiments on respiratory diseases conducted by the Army and Navy during the war period have given some information about methods for their control which might be of value to industry. These data appear to justify the following conclusions: (1) Since respiratory infections originate from people who have the disease-producing organisms in their throat and nose, the most important preventive measure is good personal hygiene to avoid the dissemination of such organisms into the air. A sound health education program should be of value in this respect. It is also suggested that industry might supply paper handkerchiefs to their employees and request them to use these when sneezing, coughing and blowing the nose and then to place them immediately in conveniently located receptacles. (2) To prevent droplet infection a distance of a few feet should be allowed between workers who face each other. (3) Oiling of floors and oil sweeping are of value in preventing the bacteria and other organisms, which settle to the floor, from again contaminating the air. This procedure may lead to a reduction in respiratory diseases such as streptococcal infections. (4) Air disinfection by irradiation of the air with ultraviolet light or by aerosols is not considered practicable for industry at present. (5) Proper sanitation in the preparation and serving of food is essential to prevent the transmission of respiratory diseases by this method. (6) Army studies have shown that the recently developed vaccine against the influenza virus Types A and B will greatly reduce the incidence of these diseases. However, there is no evidence that this influenza vaccine or any other vaccine will protect against any other types of respiratory infections including many conditions mistakenly diagnosed as influenza. It is recommended that industry urge their employees to be vaccinated against influenza A and B when signs of an epidemic of these specific conditions appear in the community, but since the duration of the immunity resulting from the influenza vaccine has not been determined and since influenza epidemics cannot be accurately forecast, it would seem better not to urge vaccination in anticipation of an epidemic. Although vaccination of all employees probably would reduce to a large extent the absenteeism during the period of an influenza epidemic, it would only slightly reduce the annual respiratory disease rate even in years when an influenza epidemic occurs. (7) The continuous administering of drugs such as sulfadiazine for prophylactic purposes is dangerous because it may lead to a condition in which drug-resistant strains predominate, and thence to epidemics of these infections. Under certain conditions, such as when streptococcal or meningococcal infections appear in a group of employees, drug prophylaxis should be used for temporarily controlling the spread of these infections. (8) Experiments have shown that neither irradiation of people with ultraviolet light nor the addition of vitamins to an ordinary diet will increase the resistance of industrial workers to respiratory infections. (9) The evidence indicates that sudden chilling of the body, exposure to inclement weather, or a marked fall in outdoor temperature lower the resistance of some people to respiratory infections. Measures to protect against the chilling of the body are therefore important. (10) The analysis of industrial sickness records and the referring of those workers with respiratory illness to their private physician for treatment is also recommended.

—From an address by ANNA M. BAETJER before the Eleventh Annual Meeting of the Industrial Hygiene Foundation of America, in Management Review, October, 1947.

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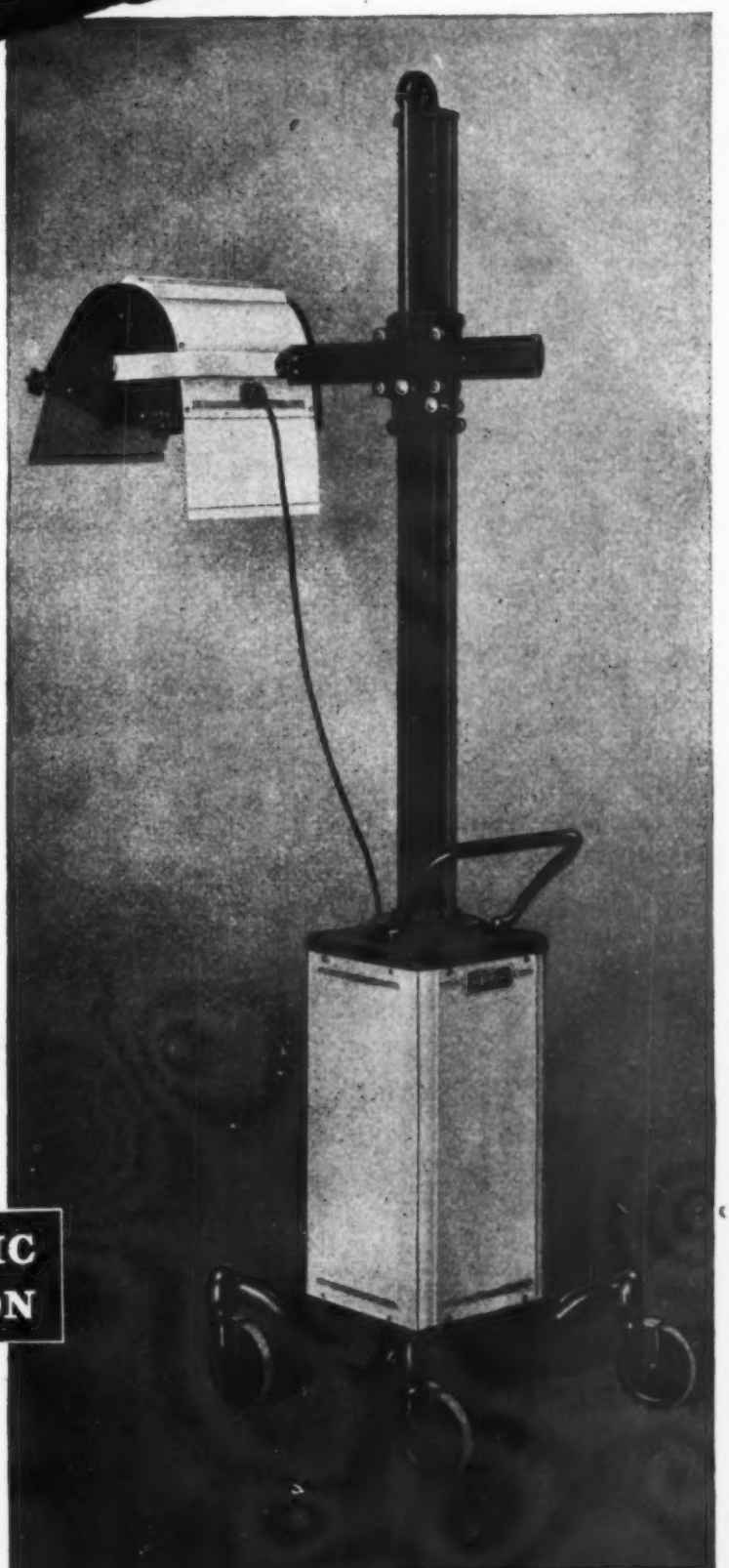

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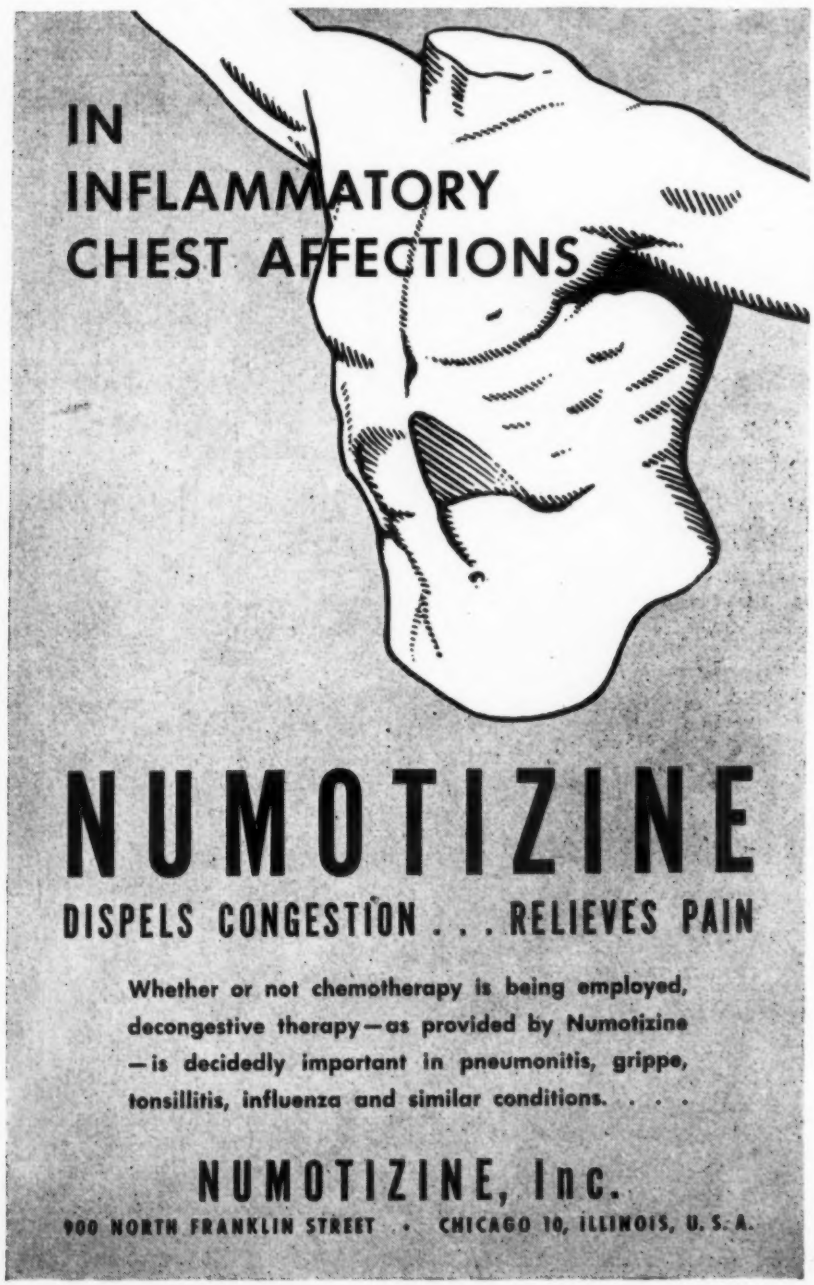
IN COMPULSORY health insurance every citizen is taxed, say 4% of his annual income, and in the Crosser Bill, H. R. 1362, for railroad workers, the total deduction is 12½%—6¼% from the employers and 6¼% from the workers. This bill is already being lauded as the pattern for social security — for medical services. The citizen, noting this substantial deduction each week from his wage will at once conclude that he is paying a pretty good sum for medical attention and he will be a monkey's uncle if he is not going to get what he is paying for and also his money's worth in full. Anyone who has had experience, as I have had in years gone by, with this type of practice, knows the answer. The citizen and his family use the medical service upon the slightest pretext, and the physician's time is occupied with the trivial ailments of those whose cases may be described as deflation of the purse while many seriously ill patients suffer from lack of detailed attention, as there are yet only 24 hours in each day in spite of modern streamlined legislation.

—From "Socialized Medicine," by HAROLD D. VAN SCHAICK, M.D., in *J. Florida Med. A.*, October, 1947.

Here We Go!

THE ILO and WHO have several fields in common. Most important among these is the question of sickness insurance, which, in many countries, is the chief method of providing medical aid for the working population: another is industrial hygiene. In the past there was a Joint Committee on Social Medicine, which included representatives of the League of Nations Health Organization and the ILO. This Committee's task was to avoid duplication and to consider the possibility of directing sickness insurance institutions towards prevention. A special joint subcommittee was formed to deal with tuberculosis. Industrial hygiene was dealt with exclusively by ILO's expert bodies, except for the question of anthrax, which was referred to a joint subcommittee.

—Cronicle of the World Health Organization, 1:3-4, 1947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The Truth About N.P.C.

IT MAY be recalled that the National Physicians Committee has been the principal target of abuse for the proponents of socialized medicine, and that over a nation-wide radio broadcast this organization was accused of having "spent one million dollars for the publication and distribution of one pamphlet." DR. EDWARD CARY, appearing before the Murray Committee, refuted this accusation by showing that in six years the National Physicians Committee had spent only $905,359.23 on *all* its activities. It is a tribute to the N.P.C.'s management that with this sum, paltry by comparison with the 75 million spent by Federal government agencies in one year, a handful of men have been able to withstand the onslaught on 45,000 Federal employees "engaged, full or part time," in propaganda activities. Perhaps, after all, there is justification for Abraham Lincoln's "faith that right makes might."

—*North Caroline Med. J.*, August, 1947.

More Propaganda

A 35 MM. filmstrip for nonmotion projectors, "Medical Insurance, Pathway to Health," is being circulated as propaganda for the Wagner-Murray-Dingell Bill. It was produced by Current History Films, New York, and approved by the Committee for the Nation's Health. The strip, which has a running time of 17 minutes and is accompanied by a narrative script and speaker's guide, consists largely of photographs and cartoons showing the "lacks" in the present system of medical care and the "solution" in compulsory prepayment.

—*Medical Economics*, August, 1947.

Not Enough

PROVIDING employees with first aid faciilties, sanitary working conditions, correct lighting, proper ventilation and safety programs is not a modern medical program. Having solved the problems of selecting men —giving due consideration to questions of health and temperament—it seems to me that industry and individual companies have a great deal to gain from a wise and thorough use of preventive medicine and what we might call constructive medicine. It is the job of good industrial management not only to maintain a healthy individual—to prevent illness—but also to help the men and women of an organization to improve their physical condition. The

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Even in advanced stages of arthritis when many patients consider themselves incurable, a complete systemic rehabilitation program can do much to restore function and abolish pain.

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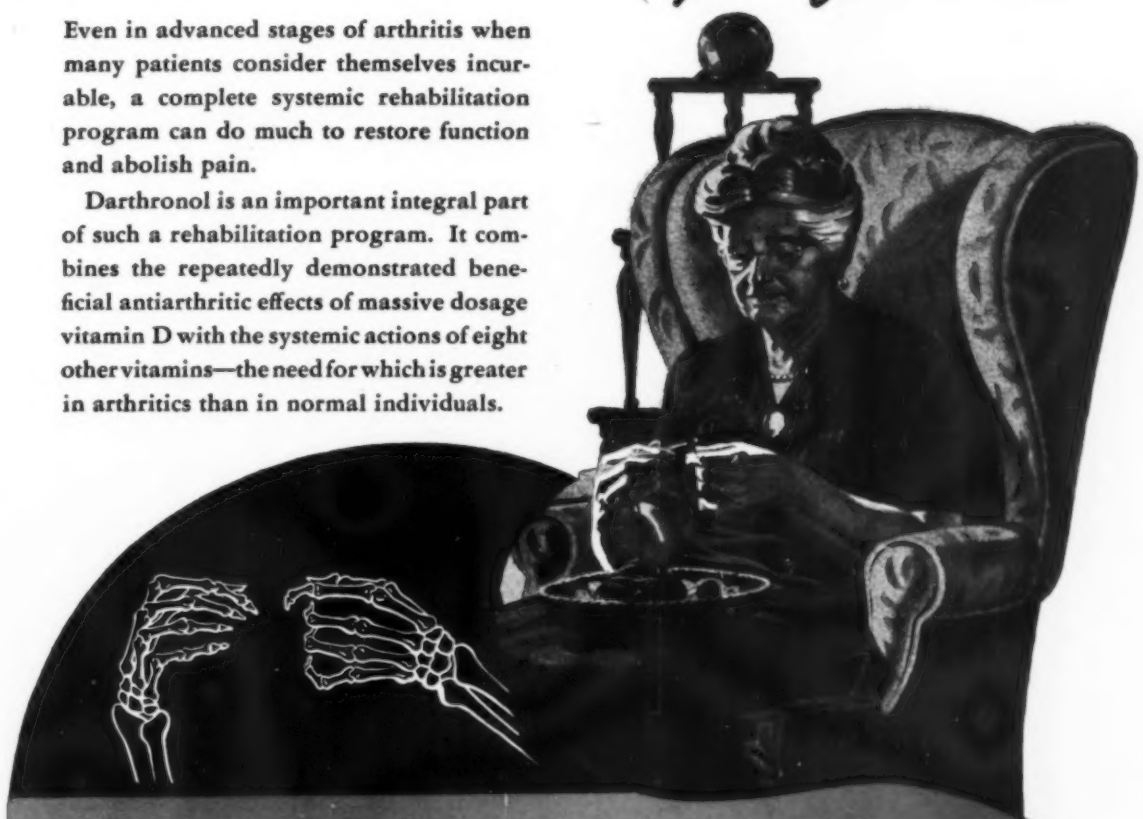

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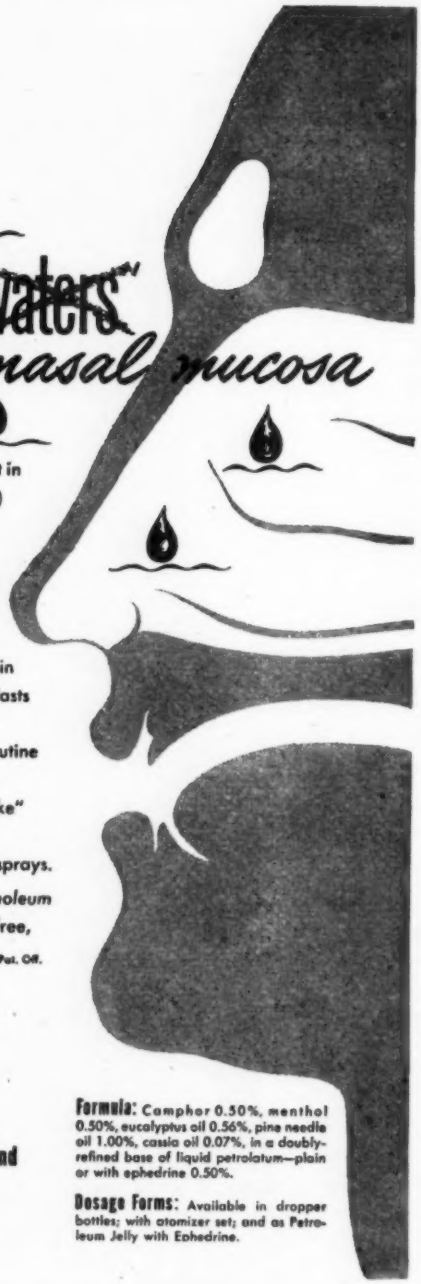

When a cold strikes and nasal membranes react in stormy protest (turgescence, hyperesthesia, etc.) "Pineoleum"* Compound's emollient oils frequently bring gratifying relief and protection. Gently spreading an adherent, oily film over irritated mucosa, it "seals in" the natural moisture, without impairing the efficiency of mucociliary defenses. While rapid in onset, Pineoleum's protective action long outlasts that of many aqueous sprays — and has been established, clinically, as perfectly safe for routine adult use.[1,2] It is particularly indicated in the precursor stage of the rhinitides, in "desert-like" climates (common in heated apartments and homes) and following treatment with aqueous sprays.

For the restoration of patent nasal airways, Pineoleum with Ephedrine provides a potent, but rebound-free, dosage of ephedrine.

*Reg. U. S. Pat. Off.

1 Griesman, B. L.: Arch. Otolaryngology, 39:124, 1944.
2. Novak, F. J., Jr.: Arch. Otolaryngology, 38:241, 1943

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moment we accept the great importance of work in this field, we will recognize that no health or medical department in any company or industry can capitalize the health opportunities which face industry without very important assistance.

—From a speech by FRANK W. ABRAMS, Chairman of the Board, Standard Oil Company (New Jersey), New York College of Medicine, Information Service.

Will Increase Work Days Lost

COMPULSORY health insurance would be more likely to increase than decrease the present rate of 300 million weeks lost each year as a result of temporary disability, according to a study made by the Research Council for Economic Security, of Chicago. The study asserts that during an average day, seven million persons are kept from their jobs by temporary illness, and that the cost to the nation in lost wages, medical bills, and related expenses is in excess of 10 billion dollars a year. This cost amounts to $70 per person, or perhaps $200 per year for each family in the United States. The effect of a compulsory health program on temporary disability was pointed out by the study: "The long-term experience in Germany under compulsory health insurance shows that the average illness in 1885 lasted 14 days and in 1932, 29 days, or more than twice as much. Although malingering probably played a part, there is little doubt that the compulsion to seek medical consultation and advice was a major factor in extending the average period of illness. Therefore, one must not expect that measures to reduce disability, especially those of a compulsory nature, would reduce the days lost due to illness."

—The Medical Forum. *Wisconsin Med. J.*, August, 1947.

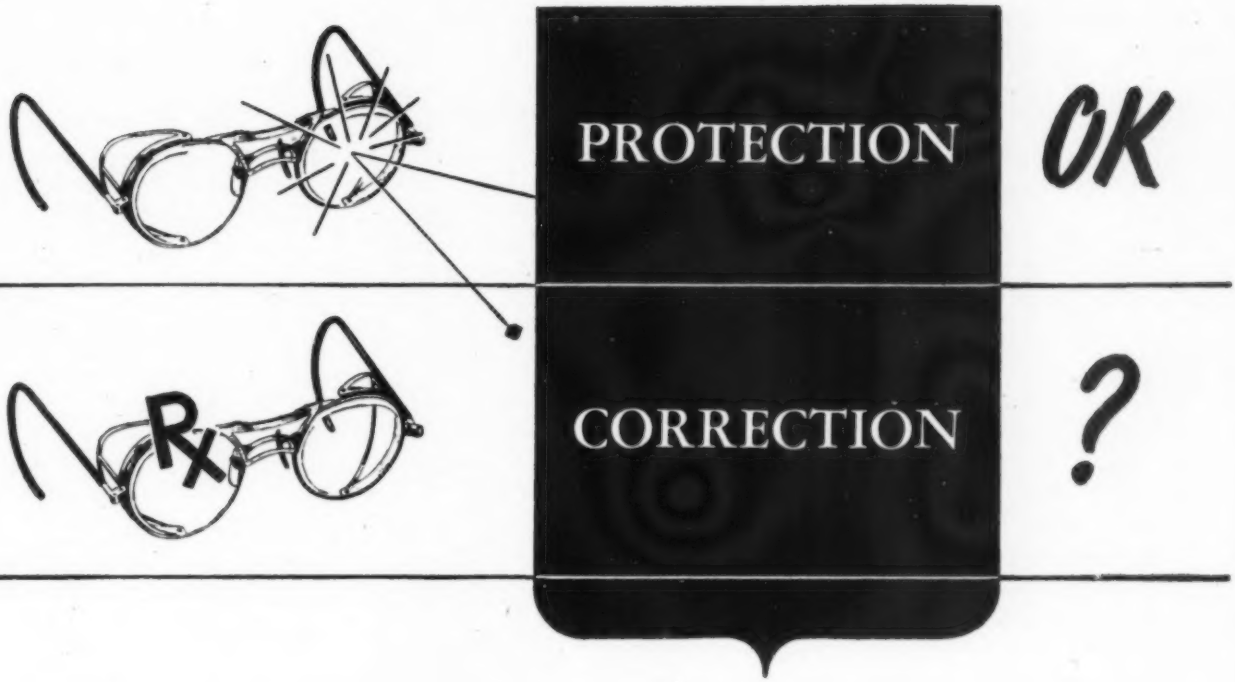
Wisconsin Industrial Health

IN COOPERATION with the Industrial Hygiene Unit of the State Board of Health, the Committee on Industrial Health has presented a series of industrial health clinics this past year which has attracted national interest. Believing that physicians concerned with the treatment of industrial injuries had little occasion to visit industrial plants and witness the working environment of their patients, the Committee sponsored three plant-visitation types of clinics in Racine, Fort Atkinson and Green Bay. The success of this program has encouraged the Committee to develop similar programs on a county level. It is hoped that these localized teaching clinics can be developed during the ensuing year, so that many of the problems of the industrial nurse, management and physicians concerned with industrial practice can be discussed in detail. An important project of the Committee on Industrial Health this past year has been the formulation of standing orders for industrial nurses and a declaration of principles governing the relationships of physicians and nurses to the industrial health program in Wisconsin. Considerable study has been given this problem by the Committee as a whole, and consultants in certain specialized fields of special importance to industrial medical practice have assisted the Committee in the preparation of this material. It is hoped that the dissemination of this Committee publication will correct some of the misunderstandings which have been existent in respect to duties and responsibilities of professional workers to plant health programs.

—Report to 1947 House of Delegates, *Wisconsin Med. J.*, September, 1947.

Defeat Political Medicine

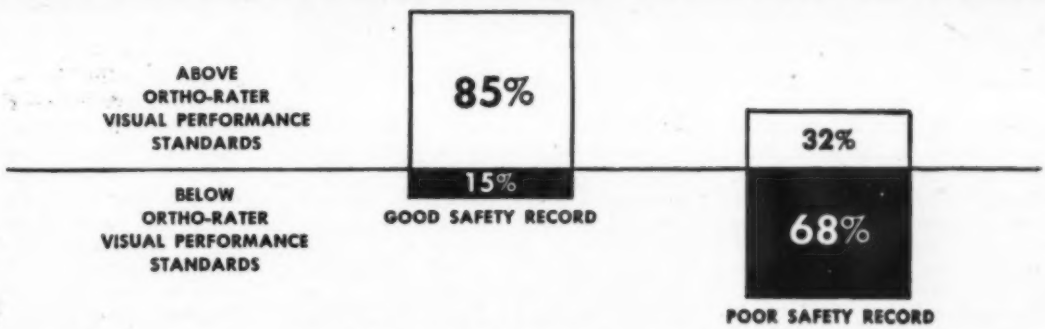
METHODS used effectively by organized medicine in Hawaii in defeating measures for political distribution of medical care in the Territory, and steps taken to guard against the passage of such legislation in the future, are reported by the National Physicians Committee for the Extension of Medical Service. "During the past three months," the Committee reports in an Informational Bulletin, "the most serious threat for the introduction of the political distribution of medical care occurred in the Territorial Legislature of Hawaii. Had this legislation been enacted, it would have introduced in the United States a precedent with far-reaching implications and results. In 1945, the Territorial Legislature passed a joint resolution creating a Hospital Services Study Commission. This Commission filed a voluminous report at the beginning of the 24th session of the Legislature on February 19, 1947. On the basis of this report two compulsory sickness insurance bills were introduced in the lower house of the Legislature. Bill 747 was identical with



EYE SAFETY IS A TWO POINT PROGRAM

• A complete eye safety program requires more than eye protection. At least half of all industrial workers need visual correction if they are to see clearly. Industrial eyewear, incorporating correction professionally prescribed for the requirements of every job, is safety eyewear in two ways. It provides protection against injury to the eyes, and it provides clear vision that makes for working safety—and efficiency. Your Bausch & Lomb distributor offers prescription service on a wide range of types of Bausch & Lomb industrial eyewear.

SAFETY FACT-FINDING CASE HISTORY...



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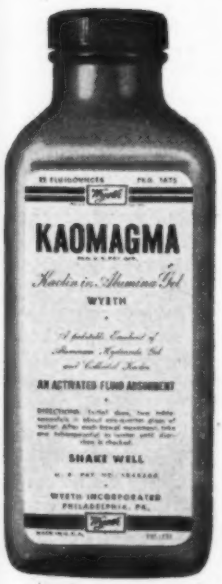
the suggested bill in the report of the Study Commission. Bill 941 was a more comprehensive plan for sickness insurance. The latter bill found favor with the members of the Legislature who were politically indebted to the labor unions. In order to defeat the two proposals the Territorial Medical Association engaged in a very intensive public relations program which included the following phases: (1) A series of conferences was held with each of the major business associations, to alert these groups concerning the full implications of compulsory sickness insurance. Culminating this series of meetings, 50 leading business men of the Islands were brought together for a lengthy conference, and by formal resolution agreed to support the position of medicine against the enactment of the proposed legislation. (2) Radio was used etxensively to interview community leaders and to demonstrate to the general public that the compulsory sickness insurance plan was inimical to the best interest of the community. Many of the leading personalities of the Islands appeared on these radio programs. (3) At frequent intervals during the Legislature advertising space was purchased in the newspapers to explain the profession's point of view. In addition, considerable editorial space was obtained and a steady stream of letters to the editor in opposition to this legislation appeared in the newspapers. (4) Constant contact was maintained with all friendly members of both houses of the Legislature, and particularly with the members of the Committee on Public Health. (5) A number of physicians prepared critical analyses of the legislation and delivered scores of talks before civic, religious, educational and business groups. *Public Hearings*: On April 24, public hearings on House Bills 747 and 941 were held by the Committee on Public Health. Contrary to all expectations the proponents were able to muster only three witnesses to testify in favor of the legislation, while 11 witnesses testified against it and many others were prepared to do so had the hearings been extended. As a result of the intensive activities of the professions and the strong showing made during the public hearings, the Committee on Public Health pocketed both Compulsory Sickness Insurance Bills. During the last days of the session, which adjourned May 3, the proponents made an effort to secure passage of a concurrent resolution to extend the Hospital Study Commission until the next session of the Legislature. This proposal was also defeated. *Long Range Public Relations Program*: The Territorial Medical Association has now established a long range public relations program. This will be adequately financed by an annual assessment on the members of the Association and includes all phases of a sound public relations policy."

—*California Medicine*, August, 1947.

Industrial Medicine in Coal Mines

THE bituminous-coal-mining industry, upon which many other industries depend, has lagged in its appreciation and utilization of preventive medicine programs for its workers. The few exceptions to this general rule stand out prominently among the mines observed during this Survey. Occasionally well-developed programs of industrial medicine and hygiene are found at coal mines operated by the larger companies—and most of these companies have major industrial interests besides coal mining. With very few exceptions, coal-mine physicians are not familiar with the miner's working environment, the physical capacities required to do several types of mining work, and the industrial-accident and occupational disease hazards of the particular mines they serve. The maintenance and statistical analysis of health and accident records are fundamental parts of any well-organized program of industrial hygiene but are not common in the coal-mining industry. Comprehensive (physical) examinations are made by a few of the larger coal-mining companies. However, chest x-ray examinations, for instance, are performed routinely at only 12, or 4.6%, of the sampled mines, which discloses too infrequent use of invaluable x-ray findings. Chest x-ray examinations and simple routine laboratory procedures cannot be readily performed at most of the surveyed mines because the necessary facilities and technicians are not available. There are known instances of labor's opposition to routine chest x-rays. Such opposi-

First we must check that diarrhea...



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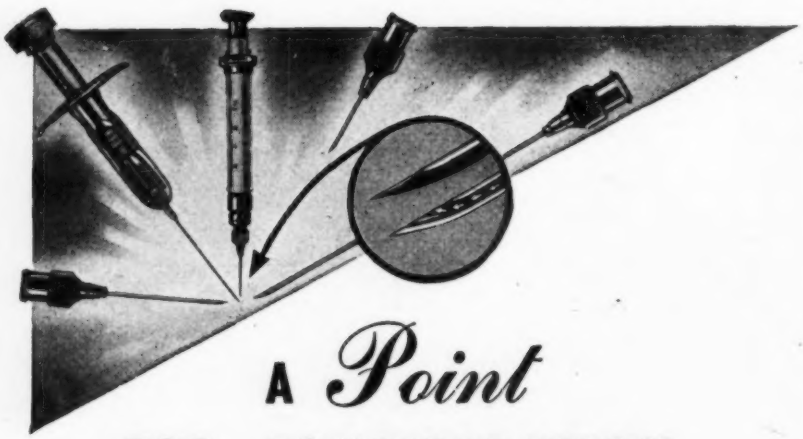

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tion is scientifically untenable and harmful to the industry, the individual and the community. The necessity for first-aid training of miners rests upon labor and management. Rather than using compensation for first-aid training as an element of discord, management and labor officials have a mutual obligation to solve the problem. As far as it has been possible to determine, there has not been a comprehensive program, or even any program at all for rehabilitating the disabled within the bituminous-coal industry. The large number of casualties from the two recent world wars have incited public opinion as it has never been aroused before to the need for rehabilitating the physically handicapped. Representatives of management have frequently expressed the view that, despite all of their efforts to provide the best possible medical service to their employees and their dependents, their motives are misunderstood and their actions greeted with suspicion. They have stated that they must listen to a great many petty and unjustifiable complaints. Further, they have declared, the bookkeeping work of making wage deductions for medical care is a burdensome and costly chore. Many have said that they would be glad to be relieved of the burdens imposed on them. The workers and their local union officials frequently complained that they have too little voice in selecting the physicians who receive the pay-roll check-off for medical care. Their two-fold grievance in some locations is that they must submit to the company's choice of a doctor and then be satisfied to patronize only him, or the assistant whom he assigns, whenever it becomes necessary to seek medical services. Obviously there is need for some clear thinking with reference to the financial responsibility of management in industrial medicine, and also with reference to the dividing line between industrial medical services and general medical services for employees and their dependents. Management's clear financial responsibility includes provisions for medical care for industrial accidents and occupational illness and has been specifically indicated by the passage in most states of workmen's compensation laws, some of which include coverage of certain occupational diseases. It is also widely conceded that, where industrial physical examinations are conducted, they, too, are part of the industrial medical program for which management is responsible. Management likewise, must take all possible active measures of *prevent* occupational injuries and illnesses. An urgent need exists for the medical profession in each of the coal-mining states to develop, in cooperation with management and labor, actuarially sound pre-payment plans, which will furnish the maximum of medical service coverage at the lowest cost consistent with continued improvement of medical services and facilities, and opportunity for future scientific progress. The development of such plans by the medical profession with the United Mine Workers of America and mine operators would contribute to the solution of many health problems of the people in the bituminous-coal-mining industry.

—From Industrial Hygiene Foundation's Digest of "A Medical Survey of the Bituminous Coal Industry," September, 1947.

DR. PILGRIM

ENROUTE to Saranac Inn, New York, with DR. CARL PETERSON for the Ramazzini rendezvous, and laying over at Utica several hours, walking about the town and seeing the historical points; and again on board and meeting DR. ROBERT LEGGE, of California, and hearing many old-time experiences of industrial work when the going was rugged; and observing the beautiful cloud effects through the valley; and next day surveying the facilities and making arrangements, and then the arrival of members and guests, the annual dinner, the Oration by DR. CAREY P. McCORD, and then reminiscences before the fireplace; and next morning snow on the ground, wherefore many elected to stay inside and count spots, among them DRS. McCORD, SANDER, PETERSON, GREENBURG and MEEK, with many a fine tale by DR. LOUIS SCHWARTZ; and then came a bright and snappy day with all morning on the putting green, and then the final convocation at dinner and thence enroute to Saranac Lake, being driven by DR. STUART MEEK. . . . AND at the Sixth Saranac Symposium where were many old and new friends and, with some of these, to eat at The Blue Gentian, called by several "Gen-

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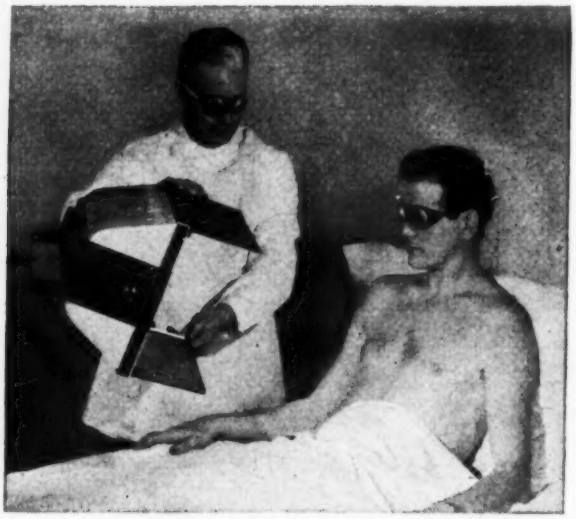

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tian Violet"; and PILGRIM reminded of his natal day by greeting cards, telegrams, and telephone messages; and there being much of scientific interest concerning beryllium at the Symposium, thereupon it being proposed that the theme song of the Symposium might well be "Roll Out the Beryl"; and to the VORWALDS for food, drink and music, where were the HAMLINS, the WEBERS, the BROWNS, and DRS. SANDER and SCHIELDKNECHT; and again in the Symposium and busy with the committee on nomenclature, facetiously dubbed "The Committee on Calling Names"; and thence to the BOWDITCHES, and the meeting of many authorities with much extramural discussion; and in the midst of all this, reminded of the passing of Howard Vincent O'Brien and of his great ability to write simply about profound things, being especially mindful of his now famous words in several articles about his son, some of which have been quoted in this column; and dining and technical converse with DRS. J. F. ZIELINSKI, F. J. JARZYNKA, J. M. SCORNAVACCHI, BENGT R. F. KJELLGERN; and later much music on the same piano on which PILGRIM played in the days of DR. ROY GARDNER, DON CUMMINGS and DR. HOMER SAMPSON, with many musical reminiscences; and later, among many Symposium duties and discussions, lunching with DR. ARTHUR VORWALD, WILLIAM GAFAFER, and JOHN MCMAHON; and then enroute feeling that there had been much of value in the Symposium; and while enroute, playing at bridge with DR. OSCAR SANDER and MESSRS. WALWORTH and COOK, and doing fairly well. . . . AND then enroute to central Indiana where doing a mine survey, with discussion of various problems with mine officials and inspectors; and then back to the desk and laboratory with much routine and many problems of administration, policy and techniques. . . . AND again to the ballfield, meeting the old cronies and participating in several rather successful encounters; and later at the desk going over various papers and the preparation of manuscripts for future meetings, meanwhile enjoying a visit with DR. RUTHERFORD JOHNSTONE, of Los Angeles, and talking of many problems particularly with respect to section programs. . . . AND at the meeting of the American Academy of Ophthalmology, speaking on "Medicolegal Problems in Industrial Ophthalmology"; and later to meet many distinguished visitors, and view the exhibits; and attending the luncheon for instructors, at which DR. VERHOEFF was honored with a certificate of merit, this being the only scheduled event at the luncheon; and meeting also DRS. HUGH and HEDWIG KUHN, MR. JOHN ROCHE, PRUDENCE VAN ARSDELL, DR. WIENER, and MESSRS. BENSON ond ALTHER. . . . AND then to the monthly dinner meeting of the Chicago Section of the AMERICAN INDUSTRIAL HYGIENE ASSOCIATION, where DR. LLOYD HAMLIN and MR. HERBERT WEBER talked well on "A Control Program in the Foundry Industry". . . . AND to Evanston to make an inspection of premises re a public liability problem, and much discussion with officials and technical men. . . . AND enroute to New Orleans on the Panama Limited for a regional conference on Public Relations and Medical Service, Pre-payment Medical Plans, and Industrial Health Problems, sitting at luncheon with DR. JEAN FELTON and DR. CHARLES R. HENRY, and meeting many of the assembled group, among them DRS. LLOYD NOLAND, LULL, MCVAY, HOLMAN TAYLOR, DERRYBERRY, HUSSEY, REINHART, CHALMERS, CARL NAU, and PETRIE; and meanwhile lunching with CHARLES HAMILTON, an industrialist, and talking of many problems with respect to organized health services; and enjoying especially the informal round table on industrial health problems, at which DR. RAYMOND HUSSEY presided well, and at which there was much profitable discussion. . . . AND again at the desk, writing reports and gathering material for subsequent presentations; and planning sojourns again to southern Indiana, Cincinnati, Indianapolis, Pittsburgh, and Louisville, of which more in later notes, particularly regarding the forthcoming important Annual Meeting of Industrial Hygiene Foundation at Pittsburgh this month.

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Industrial Medicine

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The Journal of Industrial Health, Occupational Medicine and Traumatic Surgery

With which are consolidated "The Industrial Doctor" and "International Journal of Medicine and Surgery."

The Science, the Law and the Economics of Industrial Health

Volume 16 November, 1947 Number 11

Orienting the New Employee in the Services of the Industrial Health Department

JEAN SPENCER FELTON, M.D.,
Superintendent, Health Department,
Monsanto Chemical Company, Clinton Laboratories,
Oak Ridge, Tennessee

TO THE new employee, the exacting procedures of the pre-placement physical examination are merely another milestone to be passed in getting started on the new job. With great impatience he undergoes "processing" by the Personnel Department, Security Clearance, if seeking employment in a government project, and examining and specimen-seeking by the plant health service. In the rushed determination of the new worker's physical capacities little time exists for the careful and detailed explanation of the services available to the employee through the Health Department.

Frequently laboratory procedures, such as the chest film, serodiagnostic test, or hematological studies have not been completed in time to discuss their findings with the examinee. Learning of the functions of the health service should be accomplished in a manner uninfluenced by the broad humor or caustic comments of fellow workers. In an effort to indoctrinate thoroughly the new employee, an Orientation Program was established by the Service Department of the Laboratories whereby representatives of the Personnel, Security, Health, Health-Physics, and Safety Departments could offer a welcoming word to the new employee. Through an explanation of departmental activities the newly added employee could be made to feel at home in his work scene, and could learn of those administrative procedures vital to his happiness in the group living of industry.

The various departments engaged in the program have prepared material, complete with visual aids, in order to provide a two-day program, as follows:

Orientation Program

DATE: Thursday, ..., 1947, for all employees processing after.....
Time: Each week—Thursday morning 8:10 to 10:00 A.M.
Friday morning 8:10 to 10:00 A.M.
Place: Conference Room.

Brief Outline

THURSDAY: 8:10 Welcome and Introduction to Program.
Purpose and History of Development of Clinton Laboratories Organization Chart.
8:25 Film Presenting a Simplified Story of Atomic Energy.
8:37 Personnel and Plant Policies; Working Conditions.
9:07 Recess.
9:17 Oak Ridge General Information.
9:22 Questions and Answers.
9:27 Security Information.

* * * * *

FRIDAY: 8:10 Services of the Health Department.
8:40 Health-Physics Information.
9:10 Recess.
9:20 Industrial Safety.
9:50 Summary: Questions and Answers.

All new employees hired from Thursday of the preceding week through Wednesday of the current week, attend the talks of the orientation program as another step in learning "the ground rules" of the Laboratories. Following the two periods either specific orientation pamphlets or mimeographed notes are distributed in order to fix somewhat more firmly the information offered verbally.

The Health Department

THE context of the orientation material presented by the representative of the Health Department is as follows:

I. *Activities of the Health Department as Applied to the Candidate for Employment:*
  A. Pre-placement physical appraisal.
    1. Physical examination.
    2. Visual examination.
    3. Audiometric study.
    4. Personality appraisal.

Grateful appreciation is extended to GLENN C. WILLIAMS for the caricatures.

Fig. 1

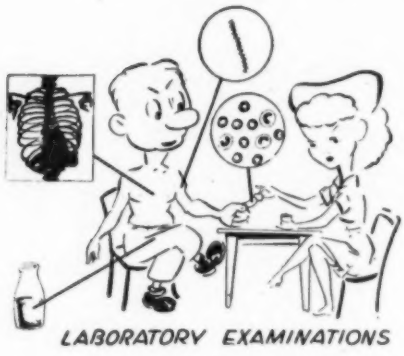

Fig. 2.

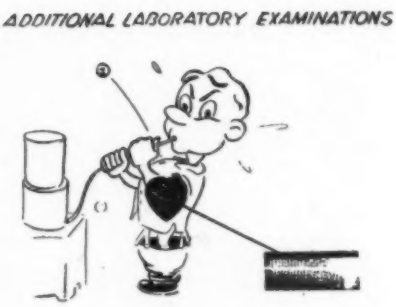

Fig. 3.

Fig. 1—Pre-placement Physical Examination. Fig. 2—The Laboratory Examinations. Fig. 3—Special Diagnostic Laboratory Procedures Completing the Pre-placement Physical Appraisal

5. Laboratory examinations:
   - (a) Complete blood count.
   - (b) Chest film.
   - (c) Urinalysis.
   - (d) Serodiagnostic test.
   - (e) Wax finger ridge impression.*
   - (f) Vital capacity.*
   - (g) Food handler examination.
   - (h) Electrocardiogram.**

B. Immunization:
   1. Smallpox and typhoid fever vaccination.

C. Recommendations regarding job placement.

D. Fitting and issue of occupational eyewear

II. *Activities of the Health Department as Applied to the Employee, from the Point of View of Health Maintenance:*

A. Repeat physical appraisal:
   1. Annual physical examination.
   2. Post-sickness absentee examination.
   3. Food handler inspection.
   4. Periodic examination of workers exposed to special hazards.
   5. Job transfer examination and recommendation.

B. Repeat laboratory examinations.

C. Health promotion (education).

D. Industrial hygiene surveys (for occupational hazards control).

E. Plant sanitation surveys.

F. Recommendation and follow-up studies of local exhaust ventilation systems.

G. Medical rehabilitation.

III. *Activities of the Health Department as Applied to the Sick or Injured Employee:*

A. Medical and/or surgical care of occupational illness or injury.

B. Emergency medical and/or surgical care for non-occupational illness or injury.

C. Liaison between ill employee and private physician, hospital, American Red Cross, Family Service Bureau, Veterans' Administration, etc.

D. Counseling service for workers presenting job maladjustments based on emotional disturbances.

E. Conferences with management or supervision in order to effect a better work picture for the emotionally disturbed employee.

IV. *Miscellaneous:*

A. Location of Health Department.

B. Termination physical examination for all employees.

C. Vacation regulations.

D. Goals of the Industrial Health Service.

The employee and his relationship to the medical services are discussed from three points of view: (a) the pre-placement examination and the applicant for employment; (b) maintaining the employee in health, and (c) care for the ill or injured employee. A dual purpose lies behind the material offered in that such a program allows one to explain the nature of, and the necessity for, the various component diagnostic steps of the pre-placement appraisal and their relationship to job placement; and to describe the services available at later periods during employment of the worker. In a unique industrial establishment such as a national atomic energy laboratory, the frequency of the industrial hygiene and clinical re-examinations is greater than in those commercial or manufacturing institutions

*These procedures are accomplished on those applicants for jobs where specific exposures to health hazards exist.

**The electrocardiographic studies are accomplished on all applicants aged 40 or over, and not on individuals under 40 because of the paucity of positive findings.

Fig. 4.

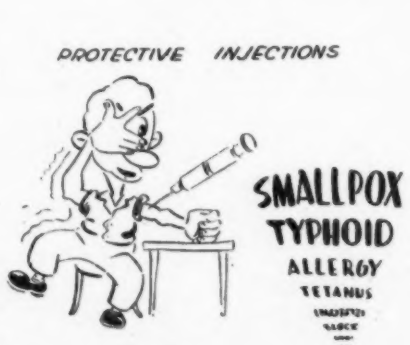

Fig. 5.

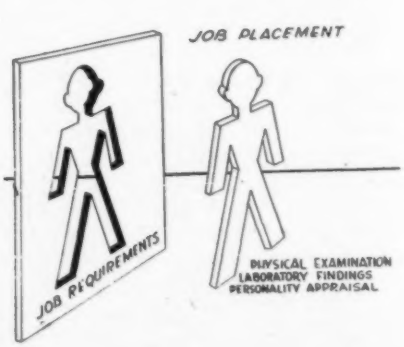

Fig. 6.

Fig. 4—Examination of Cafeteria and Canteen Workers. Fig. 5—Immunizing Inoculations. Fig. 6—Selective Placement

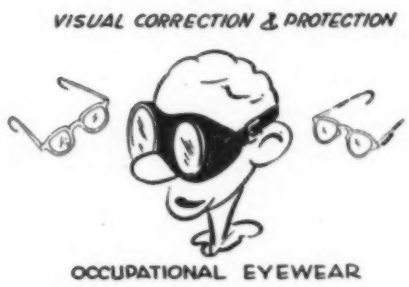

Fig. 7.

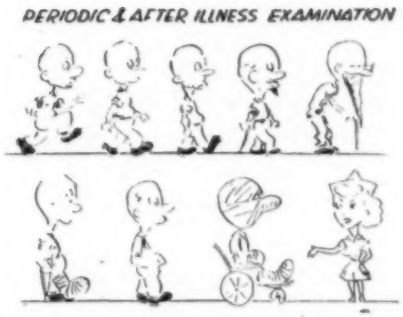

Fig. 8.

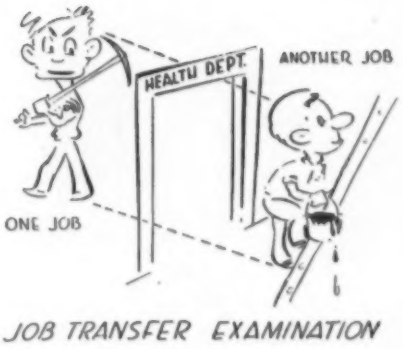

Fig. 9.

Fig. 7—Issue of Corrective or Protective Occupational Eyewear. Fig. 8—Periodic Physical Examination. Fig. 9—Examination for Job Transfer

where radiation is not an occupational hazard. It is all important that the protective or preventive phases of such a program be outlined—this is necessary not only to show the measures taken to prevent employee breakdown from exposure to working hazards, but also to emphasize that the results of all examinations are available to the worker or his private physician at any time. The frequent cry that repeated examinations are "a one-sided proposition," illogical though this is in light of their preventive medical value, is answered by guaranteeing the transmission of all the results of all the examinations.

The Approach

THE method of presentation adopted has been one of talking in a conversational manner to each worker in the assembled group. No effort is made to "sell" the Health Department, for a well-established and recognized unit can stand on its record. The material is made to be understood by all new individuals, and in the employee range from the third-grade graduate to the Ph. D., the gulf is a wide one. There has been a complete avoidance of talking down to the less intellectually equipped, or of trying to meet the attainments of the atomic scientist through an artificial superabundance of technical terms.

Frankly, the explanation of the medical services offered is given in a moderately humorous vein, omitting both the super-serious heavy approach and the bathos of low jocosity. A purely human appeal has been allowed to permeate the discussion so that the new employee, usually desirous of staying away from "the Hospital," can be made to feel that in the event of illness he will be welcome in the Health Department. In order to effect this appeal, the verbal material was documented by a series of accurate, though amusing, cartoon placards, approximately 22 by 28½ inches in size, held by an easel frame. These may be seen as Figs. 1 through 23, and a few explanatory words are offered.

The Visual Aids

THE following paragraphs represent, in substance, the material given the new employees, hence the not-too-technical terminology.

Fig. 1 shows the bewildered pre-placement physical-examinee undergoing the several procedures of the initial physical capacities appraisal: the routine organ check, the personality appraisal,* a determination of visual acuity through use of a sight-screening apparatus, and a test of hearing through an audiometric study. The accompanying diagnostic laboratory procedures are illustrated in Fig. 2, where the apprehensive applicant faces the prototype of beautiful technicians. Herewith one explains the chest film, the urinalysis, the serodiagnostic test, and the complete blood count. Needless to say, the artist being a "processed" employee, the reactions seen in black and white are not without their feeling of self-experience. Some of the special laboratory procedures accomplished are indicated in Fig. 3, where the exhaling applicant may be seen having his vital capacity checked prior to job placement where contact will be had with certain metallic poisons; if he has reached the age of 40, the electrocardiographic studies are undergone. In the event the prospective worker will be employed as a food handler in the cafeteria or canteens, special examinations of the feces are conducted, and Fig. 4 indicates the preventive control exercised with this group of employees.

It is then explained to the group that now the Health Department has finished taking things *out* of the new employee and is now ready to put things *into* him. Protecting injections are given against smallpox and typhoid fever, and in certain instances against tetanus, (Fig. 5). On the prescription of the private physician, desensitizing mixtures or estrogenic materials will be given, or, as determined by epidemic forecasts, protection against influenza will be offered.

The Health Department staff is now in possession of certain vital data relative to the worker's physical condition, as determined by the physical findings, the laboratory checks, and the estimate of emotional status or emotional potential, as prognosticated by the per-

Fig. 10—Specimen of Health Promotional Material

*A questionnaire offering both physical and emotional historical data: Cornell Index, published by the Cornell Medical School, New York, N. Y.

Fig. 11.

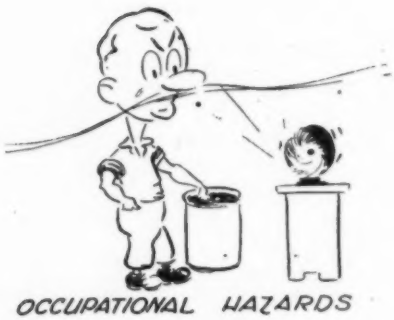

Fig. 12.

Fig. 13.

Fig. 11—Health Promotion Materials. Fig. 12—Types of Occupational Hazards. Fig. 13—Industrial Hygiene Control of the Working Environment

sonality appraisal. This information is summated and then matched against the physical requirements of the job—the round peg goes into the round hole, and job holder is matched to job, so that future job maladjustments or fractures of the supervisor-employee relations may be obviated. Through selective placement the right man, the man with the known physical capacities (be he physically or emotionally handicapped notwithstanding), gets the job that is tailored to those capacities, and a solvent employee should result, (Fig. 6).

After placement recommendations have been forwarded to the Employment Section, and the job applicant has become an employee, he is fitted with safety spectacles that give him both eye protection and visual correction. If he wears glasses ordinarily, prescription ground lenses are ordered for his occupational eye wear. Otherwise, "plano" spectacles are issued, (Fig. 7). Reference is made to occupational visual analyses in order to determine the type of such safety devices authorized for the employee's job.

Now that the individual has been added to the plant roll, it is the function of the Health Department to maintain his maximum health. This is accomplished in several ways, two of which are demonstrated in Fig. 8. At specific intervals employees are called in to be re-examined. This is done on an annual basis, if intervening illness has not brought the worker in during the interim. If he possessed certain disabilities, he may be re-checked more frequently to estimate the progress or stability of the diseases or impairment. Workers exposed to specific job hazards are examined at varying intervals, and, after each absence due to illness, the employee is checked to determine if he is physically fit to return to work. (Certain apologies are due Messrs. Olsen and Johnson for the basic caricature concept of the aging employee.)

Under a system of selective placement it is found that an employee may be physically capable of handling one job but may not have the physical qualifications for another. Hence, as is seen in Fig. 9, all workers who are changing jobs within the plant, to effect a betterment of status, or because of working conditions or health reasons, an examination of the individual is accomplished by the Health Department. It has been found frequently that duties may change within a single job title, and, therefore, a careful system of annotated job analyses is maintained at all times.

During the course of an individual's employment he will be called back for repeat laboratory examinations. This applies particularly in a plant where research in atomic energy is being carried on. The constant possibility of exposure to radiation, even though minute in sub-tolerance quantities, requires repeated complete blood counts, urinalysis, chest films, and other laboratory diagnostic procedures. The complete control of exposure to radiation will be outlined by a representative of Health-Physics Department ,wherein he will discuss the success that has been attained with monitoring of personnel and surveying of work procedures.

In an effort to maintain the individual in maximum health, an active health promotion campaign is carried on at all times and, as may be seen in Figs. 10 and 11, several media are used to acquaint the employee with new things in medicine, or with simple prophylactic measures, or offer brief instructions in preventive medical procedures that he himself can carry on. Posters are distributed monthly, a health bulletin is given to the employees each Friday afternoon as they leave the plant, and a pamphlet rack in the Health Department dispensary offers the latest in health publications. Word-of-mouth health education between the physician and the patient, or the nurse and the patient, is stressed so that the same illness or injury presented

Fig. 14.

Fig. 15.

Fig. 16.

Fig. 14—Local Exhaust Ventilation. Fig. 15—Elevation of Job Status Through Medical Rehabilitation. Fig. 16—Medical and Surgical Care for Occupational and Non-occupational Illnesses and Injuries

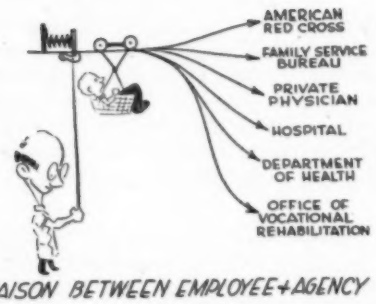

Fig. 17.

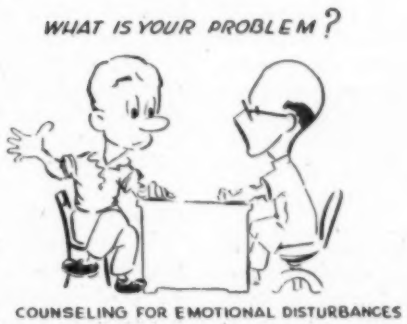

Fig. 18.

Fig. 19.

Fig. 17—The Health Department as a Liaison Between the Employee and Community Agencies. Fig. 18—The Health Department Counseling Service for Workers Presenting Job Maladjustment. Fig. 19—Conference with Management to Effect Better Job Adjustment of the Individual

once may be obviated in the future by the application of intelligent preventive measures.

In every industrial plant there are certain occupational hazards, and these will differ, depending upon the job assignment. Even if the worker carries on clerical functions in an office there may be certain hazards present in the form of impaired illumination, poor ventilation, or overcrowding of working areas. In the plant area itself, as is shown in Fig. 12, there may be toxic fumes, vapors or gases. There may be chips thrown out against the worker, or there may be specific poisonous materials, such as solvents, that will affect the skin on contact. The Health Department is aware of all existing hazardous materials, and measures the toxicity of these materials through a constant check of the working environment, as seen in Fig. 13. With the use of special instruments, samples of the air surrounding the worker are collected and these are analyzed for the presence of poisonous materials. Where exposure to quantities of dangerous materials is anticipated, systems of ventilation are designed, a caricature of which appears in Fig. 14, that will exhaust the harmful fumes or vapors from the working site. In this manner, the employee is protected against the hazardous agents with which he has to work, and no longer is it an accepted part of the job if he develops an occupational illness. Every possible protection against the development of untoward effects is offered at the job location.

The Health Department tries at all times to improve the individual's physical condition in the event that he has a disability, so that he can be of greater value to himself economically and of greater service to the plant as a productive employee. Very few individuals are physically perfect and minor physical disabilities appear in many, as a glance around the room will reveal, for several are wearing spectacles, as an example. This, fortunately, is not an occupational handicap. Through cooperation with the Office of Vocational Rehabilitation, Clinton Laboratories has been able to have certain individuals with physical disabilities be given medical or surgical correction. This is particularly true when a person's job situation has levelled off and he cannot advance in his particular field because of the handicapping defect. In addition, psychiatric counseling and guidance can be secured if some emotional disturbance is preventing the worker from reaching the next rung on the employment ladder. Here is another way in which medical rehabilitation plays a role. This is seen in the processing of certain individuals who, on physical examination such as the one described previously, have been found to have a physical disability. When this disability prevents their being hired in the particular job for which they are applying, the Office of Vocational Rehabilitation will arrange for corrective surgery or medical care. This has been accomplished in some instances here, so that these workers, although originally rejected, are now being employed gainfully. The new employee is invited to inquire about this service even if his physical disability or defect is merely a cosmetic one, such as crossed eyes, for example. Sometimes the correction of such a defect will alter the personality, so that the individual can actually do a better job through increased feelings of security and physical equality, (Fig. 15).

The means have been discussed wherein the employee is kept in good health, but there are times when the worker will become sick or may be injured and, as illustrated in Fig. 16, the Health Department will render medical or surgical care for

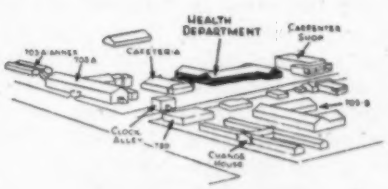

Fig. 21.
Location of Health Department

Fig 20.

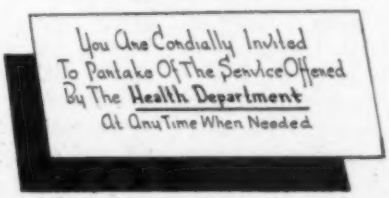

Fig. 22.

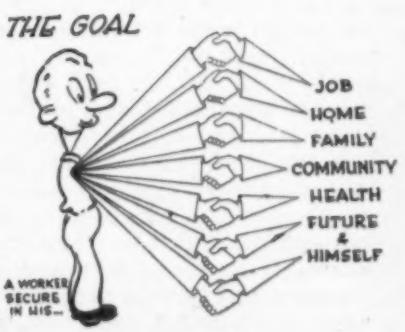

Fig. 23.

Fig. 20—Approval of "Split" Vacation for Workers Exposed to Radioactivity. Fig. 23—An Invitation to Participate in the Services Offered by the Health Department is Extended. Fig. 22—The Goals of the Health Department Program

an occupational injury or illness, that is, sickness or injury that arises at the work site and is connected immediately with employment. In comparable manner, early emergency medical or surgical care given for non-occupational illnesses or injuries, such as burns, colds, cuts, diarrheas, so that these will cause no loss of time from work. It is understood, of course, that the care of chronic diseases cannot be carried on by the industrial health service as this is the function of the private practitioner.

Fig. 17 shows another function of the health service wherein it acts in liaison between the employee and local individuals or agencies that can aid in his welfare. The Health Department knows the private physicians and is acquainted with the hospitals in Oak Ridge and surrounding towns and is familiar with the functions of the Family Service Bureau, American Red Cross, Veterans' Administration, Office of Vocational Rehabilitation, and state institutions. Every effort is made to see that the employee requesting medical guidance is referred to the appropriate specialist, the correct hospital, or, if assistance is required because of financial or family difficulties, referral is effected to the Family Service Bureau. Veterans' problems involving physical disability are referred to the correct Veterans' Administration office. Those new employees who are not familiar with these offices are invited to ask counsel of the Health Department so that they may be aided in expediting their own care.

One of the most important functions of the Health Department is the counseling service, as shown in Fig. 18. The big problems requiring care are not the cut fingers and simple colds, but are those job maladjustments that appear in the plant, based on emotional disturbances. It is recalled that a portion of the preplacement physical examination consists of a personality appraisal. The results of this questionnaire are used in following the emotionally impaired worker during the course of his employment and, frequently, the individual will be called in to see what particular emotional problem is troubling him. Supervisors often request Health Department intervention in job maladjustments where it is felt some psychological reason may exist for the worker failing to produce his maximum in work quantity or quality. Very often the employee himself will come in requesting investigation of a job difficulty, which he feels has arisen from his own emotional reaction. Additional testing is done on these workers, and a series of interviews is held so that one may understand the causes of the worker's particular behavior. When the causes are clear, the worker can usually guide his own destiny and rectify the error in his job picture. It is further explained to the employee that no individual can be two persons, i.e., one individual at home, and another who has punched the time clock and works in the shop. The problems of the home are carried to the job, and occupational difficulties are brought back to the family. Counseling brings the problems out into the open and, through release therapy and ventilation, the problems are solved and a better job adjustment is attained.

In Fig. 19 one sees a step in the follow-up of some of the counseling, wherein a conference with management or supervision is carried on so that a better work picture can be effected for the emotionally disturbed employee. If some of the reasons for impaired job performance exist within the job picture, supervision can bring about certain changes in the job itself and occasionally, through joint conference of the supervisor, the worker, and the medical director, a better understanding is had by the individuals concerned and situation work problems can be resolved.

There are certain miscellaneous functions of the Health Department that do not come under any of the three categories above but we still feel that all new employees should be familiar with them. First of all it is desired that the location of the Health Department be emphasized again, and its position in the Laboratories area may be seen in Fig. 21. The building is adjacent to the cafeteria and other service buildings, and, in the event of injury, all employees should know its exact location.

When employees terminate, a final physical examination is conducted. Another regulation made necessary by the exposure of certain workers to occupational hazards, is the approval by the Health Department of all "split vacations." It is felt desirable that the two weeks of vacation be taken as 14 consecutive days in order to allow the worker the maximum length of time away from the plant area. This is required, not only for relief from tension and for re-adjustment, but also, to allow the passage of the greatest length of time free from exposure to varying amounts of radiation. Some individuals, of course, who contact no hazardous materials and who have been in good health are allowed to divide their vacations into two single week periods, (Fig. 20).

What are the goals of the industrial health service? Why are all these procedures carried on? The goal, of course, is to have a good, happy worker on the job, who enjoys his work and is adjusted at the work scene, so that he can be of maximum benefit to himself, his family, and his employer, (Fig. 23). By following his health, and his emotional status, and solving such defects as may exist, one can have a worker who is secure within himself, who is secure in his family relations and in the community, so that he can be of service to his fellow men. Likewise, with a secure worker, his future is a stable one, and perhaps through effecting individual betterment, from all points of view, a better world may result. Therefore, (Fig. 22), all new employees are cordially invited to avail themselves of the services of the Health Department whenever they are needed. The doors of the Health Department are open 24 hours a day, and at all times the staff physicians and nurses will utilize the facilities in helping personnel with their health problems.

Results

THE materials offered in cartoon form have been extremely well received and the number of laughs resulting from the flashing of the cards seems to give the new employees a feeling of general well-being during the conferences. There is no scolding of the individual for failing to watch his own health in the past and there is no condemnation of the individual in any form whatsoever. The approach is a friendly one so that any resentment the employee may have had because of previous contact with physicians or hospitals, may be dispelled by his being welcome in the Health Department. The same material has been used in certain talks in the community where civic groups have desired knowledge of an industrial health program, and although these talks have been of greater length, the same cartoons have been used again and again with pleasing results.

It has been found, after presenting this talk on many occasions, that the humorous approach helps to shake off the horrors of medicine. Many efforts have been made in the lay press and radio to make medical doings understandable to the laymen. Physicians frequently are at fault, in that rather than attempting orientation and health education, they attempt the teaching of medicine. Typical professional phraseology

is used, and much of the material is not only dull to the lay listener, but is not absorbed. Any attempt, therefore, at having medical information comprehended by the layman is legitimized, particularly if it seems to carry the idea across to the listener in so painless a manner. It has been the experience with this orientation program that the material is assimilated well and the functions of the Health Department are understood with a new clarity. It is recommended that other industrial organizations having a health service attempt such a feature in the orientation of their employees.

This presentation effects a bond between the employee and the medical director that is difficult to secure in any other way, for here, in the course of 30 minutes or longer, if necessary to cover questions, the employee relives his "medical processing" in a new light, and adds additional information to his knowledge of the department. Anyone who takes time to explain something is appreciated, and this program has been productive of good results, for individual new employees have reported to the Health Department with specific problems in need of solution, when they have been oriented in the many services of an industrial medical program that is rich in scope, and interested in the worker as an individual.

Summary and Conclusions

THE contents of an orientation program for new industrial employees at an atomic energy research laboratory are described, and the participating departments of Health, Health-Physics, Personnel and Safety are enumerated.

2. The material offered by the Health Department, in an effort to indoctrinate the new worker recently "processed" by that department, approaches the employee from three points of view in his relationship to plant medical care: (a) as an applicant for employment undergoing the pre-placement physical examination; (b) as a well employee from the approach of health maintenance; and (c) as a sick or injured employee receiving medical care.

3. The scheme of using cartoon placards is outlined, wherein a humorous, appealing presentation allows better absorption of descriptions of the available.

4. An abstracted version of the context of the orientation talk is given with specific references to the caricature-flash cards employed.

5. Through such a program, the new employee will learn of the reasons for the extensive pre-placement procedure, will be told of the several services available to him, and, finally, will be informed that the Health Department is operated to help him resolve his health or emotional difficulties.

6. The experience, in regard to audience reception, indicates that the approach—one of humor, completeness, and personal interest—is the correct one in describing a multi-facetted industrial medical program.

7. A program of indoctrination, familiarizing the new worker with the functions of the medical staff, is recommended to all industrial establishments as a procedure that will build good will early between the medical director and the worker, and thus fortify the relations of the individual to the organization.

FOR ONE, I grow exceedingly weary of hearing how the capitalistic system is on trial. On trial for what? Has any other system accomplished as much or provided better standards of living? Why isn't Socialism on trial in England or Communism in Russia and her satellite states? If capitalism is through, why are we asked to provide the food, the money and the tools to rebuild Europe?"

—JOHN S. KNIGHT, in *Editor & Publisher; Chicago Daily News*, November 5, 1947.

Causalgia

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IN THE practice of industrial surgery one is on occasion confronted with the apparent paradox of minor trauma producing severe subjective complaints and extensive aberration of physiologic processes. When the patient's symptoms greatly exceed the objective findings in severity, it is usual to give at least tacit consideration to some element of malingering. This is especially true in the absence of a causative agent of sufficient degree to explain the symptoms.

There is however one well established syndrome characterized by maximal clinical signs which may follow the most casual and insignificant injury, or may indeed appear in the absence of any trauma whatever. To preserve the patient's best interest and prevent a diagnostic omission, it is important to consider this syndrome as a possible cause for persistent complaints.

In 1900 Sudeck described for the first time a peculiar atrophy of bone which he thought to be of inflammatory origin. Subsequent investigations revealed that this condition was sometimes associated with marked vasomotor changes in the affected limb. Patients with this symptom-complex were infrequently seen and a considerable period of time elapsed before sufficient clinical evidence was accumulated to suggest the correct relationship between observations. Sudeck's original concept was erroneous in that the osteoporotic changes noted by him resulted from disuse demineralization and anemia due to reflex vasoconstriction rather than from an infectious or inflammatory agent.

To this condition of autonomic derangement has been applied the terms, reflex sympathetic dystrophy, causalgia or Weir-Mitchell's syndrome. When bony changes are prominent, the phenomenon is termed Sudeck's atrophy.

Etiology

SOME degree of injury nearly always precedes the onset of symptoms, but in a small number of patients, the initiating condition may be some medical disease, a benign tumor or an orthostatic disturbance. In a recent series of cases reported by Evans, 43% of 32 cases followed fractures and sprains; 9% were associated with pes planus; 3% with gonorrheal arthritis; and 3% were due to plantar warts. Gunshot wounds, particularly of the upper extremity, involving the median nerve, are frequent precursors of sympathetic dystrophy. Its augmented incidence following World War II is, therefore, to be expected.

Symptoms

PAIN is predominant, and is almost invariably the reason for the patient seeking medical aid. It is usually severe and of a throbbing nature, somewhat diffusely distributed and extremely difficult to localize. "Trigger-areas" are often present, their activation even by the gentlest stimuli usually precipitate an attack. Vasomotor changes in the involved extremity are both characteristic and interesting. They fall into two main groupings: (1) *vaso-constriction* accompanied by cutaneous pallor, mottling of the skin with cyanosis and a subnormal surface temperature. The resemblance of this phase to Raynaud's disease is striking. Bone atrophy (Sudeck) is limited to this group, as the etiological factor is probably spasm of the nutrient artery; (2) vasodilatation, producing rubor, increased temperature, swelling and skin edema. Sweat-

ing is a prominent symptom, and when present, the condition may be superficially confused with erythromelalgia.

Pathogenesis

THE modern concept regarding mechanism of symptoms in causalgia, originated with Lorento de No, and postulates the establishment of a pathologic neurone arc starting at the injury-site, and spreading to involve spinal, sympathetic and even cerebral centers. The diffusion of symptoms is proportional to the extent of anatomic involvement. Formation of an "internuncial pool" (De No) consists of an afferent sensory neurone, a white preganglionic efferent tract to the lateral sympathetic ganglion, and a non-medullated (gray) postganglionic fiber carrying vasomotor stimuli back to the involved extremity. This "pool" when fully established, is a self-propagating loop of nervous tissue with a high degree of excitability and an extremely low stimulation threshold. Its sensitivity is so great in fact, that a draft of cool air can initiate the severest symptoms and produce pain so distressing that the sufferer may attempt suicide to relieve the agony.

Diagnosis

PERSISTENT or recurrent pain of the character described usually following trauma, which fails to respond to anodynes should be suspected of having a causalgic basis. The presence of vasomotor symptoms (temperature variations, swelling, rubor or pallor, sweating together with atrophy of the skin and bone in chronic cases) will substantiate this impression. Whenever sympathetic dystrophy is suspected, a block of the autonomic nerve supply to the affected area should be induced with procaine. In a true dystrophy the symptoms will be alleviated by this procedure. In addition to immediate pain relief, vasomotor differences between the involved limb and its symmetrical analogue tend to lessen or disappear entirely. The cold limb becomes warm, cutaneous mottling and excessive sweating vanishes and the normal color restored. Response to anesthesia of the involved sympathetic ganglia is therefore a reliable diagnostic criterion of this condition and should be employed in every suspected patient.

Technique of Sympathetic Block

PATIENTS will be classified as either (1) requiring anesthesia of the cervical sympathetic ganglia for lesions of the upper extremities, or (2) those patients with lesions of the trunk and/or legs for which a block of the thoraco-lumbar sympathetic segments will be necessary. Being concerned in this protocol particularly with the first group, we will dismiss Group 2 by mentioning that adequate sympathetic anesthesia will usually follow a paravertebral block by the conventional method of Oschner and de Takats. This consists of introducing 60 mm. needles between the transverse spinal processes at appropriate levels until the sympathetic chain in its retroperitoneal position is reached.

Technically it is possible, we believe, to simplify this procedure by inducing epidural anesthesia to the proper segment through one needle which pierces the sacrococcygeal membrane. This obviates the difficulty, commonly encountered in the obese, of correctly placing multiple needles in close proximity to deeply situated ganglia. We have used the transcaudal approach with complete satisfaction on numerous occasions to produce sympathetic block of the lower extremity in thrombophlebitis and find it superior to other methods.

Stellate Ganglion Block

THIS procedure is performed by using as guides three anatomical landmarks prominent in the cervical region. They are (1) cricoid cartilage; (2) M. sternocleidomastoid (sternal insertion); (3) carotid (Chassignaic's) tubercle on the sixth cervical vertebra.

The patient's head is placed in neutral position, chin slightly elevated, and an area from mandible to third rib is antiseptically prepared (Tinct. Merthiolate 1:1000) then draped with sterile towels to expose the anterior triangle on the affected side. The operator scrubs, and after donning sterile gloves, palpates the medial edge of the sternocleidomastoid at the level of the cricoid cartilage. Advancing deeper into the cervical tissues at this point, the palpating finger will feel the pulsations of the carotid artery, and on a more postero-lateral plane, the distinct resistance of the carotid tubercle. Some practice is required to recognize this bony prominence, but, once felt, it will never be missed. Reaching the tubercle in this manner displaces the sternocleido-mastoid laterally and the contents of the carotid sheath, medially, forming a path devoid of important structures. A skin wheal is raised over the tubercle with 1% procaine and a 22G.-3 in. Labat needle attached to a Luer-Lok syringe containing 10 cc. of 1% procaine is passed through this wheal along the course of the palpating finger. When the point of the needle impinges on the transverse process (sixth cervical) 5 cc. of procaine is injected after aspiration shows no blood-vessel penetration. The needle is then withdrawn slightly and directed distally to the seventh cervical transverse process where another 5 cc. is deposited. This completes the injection. The patient should now be carefully observed for signs of an effective sympathetic block. These consist of a unilateral Horner's syndrome (lid ptosis, enophthalmus and miosis) and the alleviation of pain in the causalgic limb. Improvement in vasomotor tone in addition to these effects will appear within 10 minutes after injection, and will be maintained for several hours, following which, the original complaints may return with varying degrees of severity. The injection may be repeated to afford symptomatic relief.

CASE REPORT. L. R. S., white male, age 40 years, was riding to work aboard a public service bus on February 14, 1946. The bus had halted to discharge its passengers when it was struck from the rear by another vehicle. The patient was thrown to the floor, fracturing (as was later shown by x-ray) the right fifth and sixth ribs in the midaxillary line. His upper false denture was broken. There was no loss of consciousness nor bleeding from any body orifice. On the following day, his physician taped the right thorax, after roentgen confirmation of the lesions. One week later the patient noticed a dull, steady throbbing pain in the right shoulder. Analgesics (codein gr. i) gave only temporary relief and the discomfort increased so that he was unable to work. Insomnia became a prominent symptom, accompanied by nausea and anorexia, and there was a progressive decrease in weight. He became very introspective and melancholy regarding this state of affairs.

On January 2, 1947, in the early afternoon following a particularly severe episode of head and shoulder pain, the patient's attention was attracted to a rhythmic, involuntary twitching of the right arm. On the following day he was taken to the hospital where treatment was instituted for arthritis. He noticed that his right hand was considerably swollen and tender. Flexion of the fingers was limited and very painful. He stated that his right ear was hyperre-

Fig. 1
Infra-red photograph to demonstrate increase of superficial veins on the right forearm

active to sound and that loud noises produced unpleasant auditory sensations.

Past history disclosed a Neisserian infection at age 19; appendectomy in 1932 followed by a postoperative pneumonia which resolved uneventfully.

Physical examination: The patient was a poorly nourished individual showing evidences of recent weight loss. The head was negative except for an aural hypersensitivity as indicated by wincing to moderately-loud sounds. There was a slight left to right nystagmus. The neck was normal. Heart sounds were physiologic; no cardiac enlargement. The lung fields were clear; the sites of previous rib fractures, not tender. The abdomen was scaphoid and objectively normal, with a healed right rectus incision of the abdominal wall.

Very significant asymmetric changes were present in the upper limbs. On the left side, the arm was normal in appearance, reflexes active and muscle tone satisfactory. The right arm from fingers to shoulder was swollen despite evidence of considerable muscle atrophy. The bicipital tendon reflex was diminished. The fingers were held in semi-flexion (25°) and active extension caused intense subjective discomfort. The skin was warm to touch and gave a temperature reading of 37°. On the left arm, the reading was 34°C. A distinct though slight increase in prominence of the superficial veins of the right forearm was noted. Infra-red photos verified this (Fig. 1) by demonstrating a relative plethora of the venous channels here. The remaining portion of the examination disclosed no unusual features.

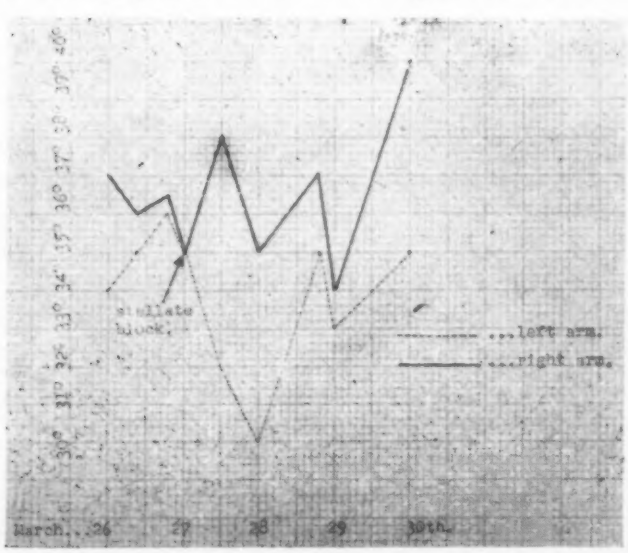

Fig. 2.
Showing temperature variations between right and left arms, and effect of stellate block

We considered that this patient's trouble represented a causalgic state involving the right arm, and decided to establish a stellate ganglion block for verification of the diagnosis and to afford him whatever degree of pain-relief this procedure might produce.

On March 27 (the day following his admission to St. Elizabeth Hospital) a cervical sympathetic block was performed by the described technique. This was promptly followed by a complete Horner's syndrome and alleviation of all subjective discomfort.

Surface temperature readings had been taken four times daily during this hospital stay. The results are shown in Fig. 2. It is interesting to note that the interval covering the effective duration of the nerve block (March 27, 10:10 A.M. to 4:00 P.M.) was the only period of time during which the temperatures of both upper extremities were identical.

The divergence of readings starting at 4:15 P.M. coincided with the active return of all signs and symptoms present on admission.

With the factual date now available, we felt confident of the veracity of the initial clinical impression, and informed the patient that surgical interruption of the involved sympathetic chain was indicated. This was taken under advisement by him with no action to date.

Summary

THE condition of causalgia should be considered as an etiological factor in all chronically painful limbs showing vasomotor changes. Injury is the usual, but not necessarily exclusive, antecedent. Pathogenesis is the formation of an "internuncial pool" (DeNo) composed of highly irritable neurones including components of the autonomic system. The diagnostic and therapeutic procedure of sympathetic block at an appropriate level is strongly recommended.

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PLANNING to retire at 65? You'll probably feel better, be happier and live longer if you continue some kind of work long after you are eligible for retirement, say the authors of "When You Grow Older," new Public Affairs pamphlet published by the Public Affairs Committee, Inc., 22 East 38th St., New York City. "Many men and women, successful in business, the arts, or the professions, look forward to their fifties as a time when they flee for the asylum to their 'farm,' their 10-acre estate. There they read, do a little gardening, mingle with the natives, and imagine they have learned the lesson of growing old gracefully." Actually, according to the pamphlet, this is "how to grow old disgracefully." While work should be cut down gradually, people need purposeful activity as long as they live for their physical and mental health.

—*Michigan Public Health*, October, 1947.

MANHATTAN Rubber Division, Raybestos-Manhattan, Inc., Passiac, New Jersey, was the scene of an industrial medicine clinic recently when the plant was host to a group of New Jersey physicians. A highlight of the clinic was an inspection of the 14-room Plant Hospital, the most modern in New Jersey. In 1908 Manhattan was the first industrial plant in the busy Passaic area, and perhaps in the state, to set up its own first aid hospital. The present hospital was designed by DR. J. M. KEATING, plant physician, and is completely equipped.

Influenza Epidemic

—At Chevrolet Gray Iron Foundry—

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DURING the week ending Saturday, February 22, 1947, absenteeism at the Chevrolet-Grey Iron Foundry reached a very respectable "low." We in the Medical Department were quite pleased at the lower absentee rate. However, there was one aspect of plant health that was easily noticeable. It was an increased incidence of common colds with associated sinus involvement. These cases were for the most part not disabling. We were using penicillin inhalation therapy for some of these sinus infections with fairly good results.

On Monday, February 24, I came to the office at 8:15 A.M., as usually. There were two female employees waiting for me. They had headache, neckache, complained of feeling feverish and had very slight fever. I interviewed and examined these girls carefully because I thought we had two cases of meningitis on our hands. We sent them home, as they were obviously unwell. I didn't notice any great increase in complaints until about 1:15 P.M. at which time there was a parade of patients with "strained" and "lame" backs. To be honest about it I was disgusted. It looked like the preceding Sunday had been a rough one for many employees. I examined some 12 back cases between 1:15 and 3:45 P.M. and these, with the general run of cases, just about wore me down. By the next morning we knew we were in a real epidemic and I put in a call to the Medical Consultant of General Motors and notified the front office to look for something big in the way of an epidemic. A top-side executive was visiting us that afternoon and the front office people told him that the Medical Director was complaining of an epidemic. His reply was that "this was the only place" where there was such an epidemic. A check on other plants in the vicinity revealed that they did not know of any epidemic. In a few days, however, the epidemic became general in the community.

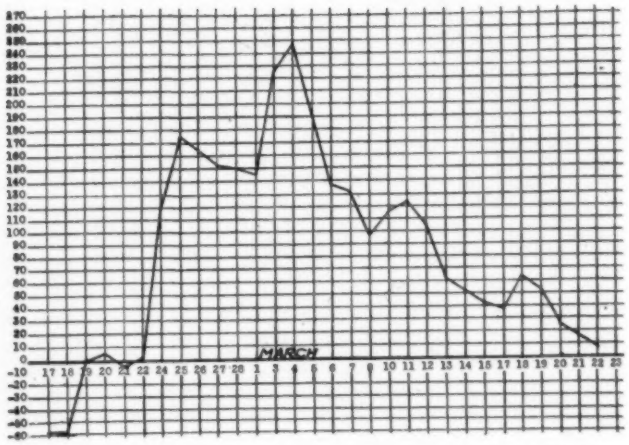
We kept records of cases *we saw* in the Medical Department and the results were as follows:

DATE	1ST SHIFT	2ND SHIFT	3RD SHIFT	TOTAL
2-25-47	12	19	2	33
2-26-47	10	14	0	24
2-27-47	9*	9	1	19
2-28-47	11	10	0	21
3-1-47	7	11	0	18
3-3-47	19	11	0	30
3-4-47	8	4	0	12
3-5-47	7	5	1	13
3-6-47	5	2	2	9
TOTALS..	88	85	6	179

The above cases were those that we saw. The great majority of cases did not report for work and were not seen.

To show the effect of the epidemic an absenteeism graph is attached. This shows absenteeism in excess of normal. The curve for the week of February 17 to 22 is based on the normal average week of February 10 to 15, and the curve beginning on February 22 is based on the absentee record of the week of February 17 to 22, which was an average week.

This discloses total absences excused and non-excused, personal and disability and all other. Possibly some employees used the epidemic as an excuse for staying away from work unnecessarily, but it is believed there were very few such cases. There were no holidays, severe storms or other elements to affect the absentee rate. Therefore the over-all absentee rate is a good indication of the severity of the epidemic.



The excess absenteeism for any given day was based on the average absenteeism for that day of the week in the previous week. This method was used because one experience had shown that the daily absentee curve for any given week showed a definite pattern. The highest rate was persistently on Saturday, being about 14.4%; next was Monday with a rate of 10.1%; Tuesday and Fridays were about even with 7.7%, and Wednesday and Thursday were about even with 6.7%.

It should be noted that there were three rises in the curve, one on March 1, one on March 8, and one on March 17. These increases were due in part at least to recurrence of disease in the same person.

A total of 2622 work days were lost during the epidemic. The average lost time was estimated as 2½ days. The length of disability was slightly longer, but Sunday is not considered as a work day. It is estimated that 1048 employees were disabled as a result of the epidemic. This was approximately 23% of the "plant strength." It was obvious to us that many employees continued to work with their influenza. There were very few complications noted, however employees complained of weakness and slowness in regaining strength. No medication seemed effective.

This small epidemic was interesting for the following reasons: it exploded itself without warning in a period relatively free of other diseases. The length of the epidemic which was about 28 to 30 days is significant.

*One of these was the Medical Director himself, who was sick for four days but managed to stay on the job.

PREPARATIONS are now being made to publish the new eighteenth edition of the American Medical Directory. The last edition of the Directory was issued late in 1942. Since that time, it has been impossible to publish a new edition because of wartime restrictions and the shortage of paper and labor. About November 15, a directory card will be mailed to every physician in the United States, its dependencies, and Canada, requesting information to be used in compiling the new Directory. Physicians receiving an information card should fill it out and return it promptly whether or not any change has occurred in any of the points on which information is requested. It is urged that those physicians also fill out the right half of the card, which information will be used exclusively for statistical purposes. Therefore, should any physician fail to receive one of these Directory Information cards by December 1, he should write at once to the A.M.A. Directory Department requesting a duplicate card be mailed.

Basic Principles and Techniques of Interviewing and Counselling

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THE one all-important basic requirement in interviewing and counseling is skill in the art of listening, questioning, and responding. Since content often rests to a significant degree on technique, it is as essential to possess knowledge and skill in methods of conducting an interview as it is to understand and be able to interpret the personal, social, vocational, and emotional material disclosed. The counselor whose approach is based on a workable understanding of the principles of mental health is constantly alert to the unending and varied applications of these principles which each new counseling situation demands. Because his own potentialities for growth are no more static than those of the individuals he serves, the experienced counselor or therapist knows the importance of occasionally reviewing his techniques, with a view toward assuring and maintaining the highest level of effectiveness in his face-to-face interpersonal relationships.

Before discussing specific counseling techniques and procedures, it is necessary to briefly mention the personality qualifications of those who seek to do work in this field. Besides possessing a fundamental liking for people, the good counselor has a well-balanced, mature personality, capable of building up understanding and rapport without becoming emotionally involved himself. He must know how to forestall overdependence on the one hand and avoid stirring up negative responses which interfere with the constructive purpose of the interview on the other. He should be alert to the possible effect of "blind spots" based on opinions, strong beliefs, likes, dislikes, or limitations of his own which may interfere with the basic requirements of impartiality and objectivity. A few common examples of this are fixed attitudes and convictions regarding race, religion, occupational status, the use of alcohol, or membership in special social groups.

Interviews can be conceived as taking place on varying levels of complexity. The simplest types involve a direct inter-change of factual material. When an interview on this purely informational level is concerned predominantly with a one-way flow of facts, as in giving instructions, orders, directions, or interpreting policies, it is always well for the interviewer to keep before him some of the fundamental laws of learning. He should remember for example that it is always more difficult to impress an individual with new thoughts if he is laboring under an emotional conflict which is interfering with his attention. The counselor must also avoid giving out more new material than can be assimilated at any one time. Obviously, his vocabulary must not go beyond the other individual's level of understanding. Since learning always takes place more effectively if the individual can participate in the process, an opportunity should be provided for him to express what he has learned in his own words. It should be apparent that mere advice-giving, when not aided by further counseling techniques, frequently falls far short of meeting these objectives.

A somewhat higher order of skill is required when the primary purpose of the interview is to elicit information. Here the counselor must be adept in questioning and in both active and passive listening techniques. He must not assume that because a person has a problem for which he is seeking help he will by virtue of that fact alone discuss all important aspects of it freely and completely. Quite frequently certain central issues are sidestepped while irrevelant and incidental topics are given undue importance during the course of the interview. While this may of course be done consciously and deliberately, it is more often a self-protective mechanism by means of which an individual avoids painful or unfavorable disclosures. In his effort to bring the significant issues to the surface, the counselor must utilize techniques which help the individual tell things he normally resists saying or finds it difficult to express without assistance. On the other hand, he must avoid plunging the counselee into self-revelations which may be damaging.

The drawing out of pertinent and relevant information, especially when there is a realized or an unrealized resistance, is one of the highest achievements of the counseling function. This task presents the greatest challenge to the interviewer's counseling skills. The psychiatrist utilizes such an approach in eliciting all the psychological data needed for diagnosis and therapy. The social worker uses it along with the required specific questions in constructing a case history. Employment interviewers gain important supplementary facts from applicants if they are skilled in this technique. In religious counseling, and particularly in dealing with children, the high value attached to this procedure is well expressed by the phrase, "the ministry of listening."

It is not possible to draw sharp distinctions between interviewing and counseling since the techniques are so closely related, but for purposes of definition it might be stated that counseling begins when the interview goes beyond the mere exchange of factual and objective information to the consideration of subjective material underlying behavior. The counseling process also includes efforts made by both participants to modify emotional attitudes and basic motivation.

Effective counseling and therapy rests squarely on these two phases of interviewing—the giving and the receiving of information bearing on the individual's emotional development. In therapy, as has been mentioned, the counselor's major function is the obtaining and sharing, rather than the giving of information. The object of therapy is to make hitherto unrealized aspects of the individual's problem accessible to him. Counseling in this sense is an individual learning process which permits the individual to talk about his inner self without his customary defensive and protective safeguards. Such an undertaking carries with it certain dangers. It is not to be embarked upon lightly, nor can it be accomplished in only a short time. It is usually a long process, and although a constructive beginning can be made on the first contact, it is practically never completed in a single interview. Attitudes and motivation underlying behavior are too deeply rooted to be modified by only one such influence, even if the initial interview is expertly conducted and the individual is both receptive and cooperative. The wise counselor does not attempt to achieve the ends of therapy by any sudden transformation. The aim is always modification through growth, not disruption.

From a practical standpoint the counseling interview has two main objectives. The first is the obvious task of resolving the presenting situation or complaint such that harmonious relationships can be reestablished, at least with respect to the immediate problem under consideration. But there must always be a recognition of the likelihood that what appears to be the whole problem may actually be only a small or in-

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cidental part of it. The second purpose of counseling is therefore to bring under consideration the more general principles of behavior underlying the present focus, to clarify the basic issues involved, and to assist the individual in seeking out methods of improving future adjustments, and to emphasize prevention. This is the ultimate aim of all soundly based therapy.

The approach used in phrasing interview questions is summarized with revealing simplicity in a little verse by Kipling:

> I have six honest serving men,
> (They taught me all I knew);
> Their names are what and why and when,
> And how and where and who.

It is an interesting fact that all the information needed to construct an individual case history depends on adequate answers to questions beginning with who, what, when, where, how, and why. Deeper issues tend naturally to be disclosed when questions such as the following are woven into the body of the interview: What are some of the apparent causes of the problem? What solutions have been attempted? Who are the other persons concerned? Who helps or hinders in arriving at a solution? When did the trouble have its earliest beginnings? Where is the problem most (or least) pronounced? How have similar problems been met on other occasions? Why have efforts to solve the problem failed?

The responses made to questions of this type will aid the counselor in arriving at a preliminary decision as to the chronicity, severity, complications and ramifications of the problem, and help in determining whether treatment falls within his province or whether or not referral will be necessary. The non-professional counselor need not be overly concerned with technical matters of diagnosis beyond determining so far as possible if the problem is minor, moderate, or severe in degree. When the need for further consultation is apparent, the counselor should discuss this step frankly as one of the acknowledged responsibilities of the counseling relationship.

The greatest opportunities as well as the more serious pitfalls in counseling are related to the handling of emotionally charged material. Expressions of underlying emotion may unexpectedly make their appearance even in the simpler or routine types of interviews, and the counselor must be prepared to handle them without doing harm or jeopardizing his future relationships with the individual. The fact that the counselor must remain objective does not mean that the relationship for him is merely a mechanical or impersonal affair. Some of the emotional energy which is generated or reawakened in the counseling session inevitably becomes directed toward the counselor or toward the functional responsibility he in some way represents. Emotional reactions of this kind developed within the counseling relationship are referred to by the term transference. The counselor must recognize when such transference bonds become excessively positive or negative, and must utilize techniques which will permit this energy to find new and more constructive channels of expression.

Successful counseling with children often rests on a direct emotional kinship to which the child makes a natural response. The counseling which parents do with their own children rests on a similar but a much more intimate relationship, and it is effective many times in direct proportion to the depth and strength of such previously established emotional bonds. Counselors do not and cannot function as members of the family, yet their relationship in many ways approaches that of an interested, understanding, and trusted parent-surrogate. When the emotional transference shows a tendency to be overly dependent or affectionate, or when there is undue resistance or even hostility, its energy is derived to an important degree from previous parent-child relationships. Psychiatric consultation is imperative where there are persisting or frequently recurring emotional disturbances of this type.

BEFORE considering the counseling techniques used when there is adequate time for preparation and deliberation, it is helpful to review briefly the most effective methods of handling emergency mental hygiene situations. This is sometimes referred to as psychological first aid. Manifestations of sudden fear or panic, acute grief, painful illness, serious injury, or a suicidal attempt, all require immediate and capable management. A counselor must be able to assume responsibility for the emergency care of wildly excited persons, those showing excessive anger, rage, belligerency, or pugnacity. Hysterical, or intoxicated individuals, and disturbed mental patients who are resistive to psychiatric treatment, are examples of human problem situations which are particularly difficult to handle in the home or community when other resources of therapy are not immediately available.

Treatment of such situations is best approached by considering what one would do with a child under like circumstances. It is a good rule in emergencies to treat the psychologically ill person as a frightened child. Such a person needs to be quietly, firmly, sympathetically and undramatically taken by the hand and led to a place of shelter and security. Any show of fear on the part of the first-aider, or any effort to argue, threaten, or physically restrain such individuals only excites them more. The individual must be made to feel that he is in the hands of those who understand and in whom he can place his trust. As quickly and as deftly as possible, the emotionally upset person should be taken to a quiet, relatively isolated place where he can sit or lie down and talk freely and in confidence. After this has been accomplished, the procedure is essentially the same as for other counseling situations.

It should be remembered that therapy cannot take place until confidence is won and held. The healing influence which is associated with talking out one's problem is not available to the individual until his confidence has been gained and the physical accompaniments of strong emotion have been given an opportunity to subside. In strong emotional states blood pressure rises, pulse and respirations are accelerated, muscles are tense, adrenalin is poured into the blood stream and energy is consumed at a more rapid rate. It usually requires 20 minutes or longer for these symptoms of physiological overstimulation to subside.

It is obvious that if an emergency situation is capably handled by a counselor, he will have little difficulty in maintaining rapport and cooperation in subsequent contacts with that individual. Regardless of the reason for or the mode of referral, much if not all of the progress in counseling hinges on the outcome of the first interview, and it is for this reason that the counselor must be prepared to utilize his skill to the fullest in his initial contact.

Skilled listening, as has been emphasized again and again, constitutes the major part of the counselor's therapeutic armamentarium. One particularly effective listening technique used by phychiatrists and psychologists, and which in recent years has been propounded by Dr. Carl Rogers, is called the non-directive method.

In using this technic the counselor aims to mirror the counselee's emotion in such a way that he is led to clarify underlying aspects of the problem which were not previously realized as significant. For example, an individual may complain of not being treated right. The inexperienced counselor, too ready to reassure and minimize, might follow his first inclination and reply, "All of us are treated poorly sometimes; we have to learn to put up with such things." The non-directive answer on the other hand would be simply, "You feel hurt because people don't seem to understand you." This gives the counselee an opportunity to amplify his feelings further. He may reply, "Yes, I do; nobody cares about my side of it." The counselee's attention has been shifted from his feeling of resentment against others to his own problems, which he is now ready to discuss. If at this point the inept interviewer would say, "Everybody has their own troubles; the thing for you to do is face yours more realistically," he would be endangering his contact and destroying his usefulness to the counselee.

The "You feel . . ." technique leads the counselee step by step to a fuller and more realistic appraisal of his situation by giving the direction of the discussion over to him. Such an end result is seldom reached by the method of too early reassurance, by lecturing, giving premature advice, or by diverting attention through the use of anecdotes or analogies. It goes without saying that the non-directive technique is effective in many therapeutic situations where advice, warnings, exhortation, or strongly worded recommendations completely fail. This method unobtrusively leads individuals to say what they could not otherwise express regarding underlying feelings, and it opens the way for them to initiate corrective measures themselves. It is a listening technique which offers a special and unique device for facilitating self-expression, and it can be used safely in any stage of the counseling interview.

As an auxiliary technique, reassurance may be of considerable usefulness in counseling. In giving reassurance the counselor tries to dispel fear and create a feeling of security. This can often be done more by the counselor's manner than by what he says. It is important to avoid blanket reassurance covering areas with which the counselor has no special knowledge. Assurances are much more effective when given in respect to specific topics concerning which the counselor has authoritative information, experience, or judgment.

The physician, for example, can reassure a patient that worrisome symptoms are not on an organic basis, and he does so only after he has completed a physical examination. Every counselor similarly has special information concerning which he can speak with authority, and in respect to these points he can and should give proper reassurance. As in giving advice, the danger lies in attempting to reassure too quickly or on the basis of inadequate information. The counselor must not expect the entire problem to be solved by authoritative reassurance which bears on only one aspect of it.

Another time worn method involves the use of suggestion. Because of the ineffectiveness and even harm resulting from the wrong use of suggestion, and the abuse of it in high-pressure advertising, the counselor should not fall into the error of dismissing this method as unworthy of the therapist's efforts. As a stimulus which aims to touch off determining tendencies, suggestion can of course be used both constructively and destructively. In therapy it is used to direct and redirect attention to desirable goals, and to the steps necessary for their attainment. Properly used suggestions predict a beneficial outcome to a problem provided certain specific measures are first carried out. Suggestion plays no small part in the physician's prescription, and in fact is often the more effective part of the remedy. The counselor who is inexpert in the use of this method may suggest the very disorders he is attempting to avoid. In the hands of the counselor who knows how and when to use it, suggestion is a powerful psychotherapeutic instrument.

The professionally trained therapist should be called upon when emotional factors are complex and deeply seated, and when physical complaints or symptoms constitute a significant part of the problem. In such situations a knowledge of both medicine and psychiatry is necessary, along with which a good understanding of psychoanalysis is desirable. Psychiatric referral is indicated when any of the following types of reactions or behavior patterns are observed: Chronic anxiety and tension states, irrational obsessions or compulsions ,sexual maladjustment, hysterical tendencies, persistent bodily complaints in the absence of organic findings, excessive use of alcohol or drugs, tendencies toward persistent apathy and withdrawal from social contacts, paranoid ideas or delusions, personality deviations such as egocentricity, homosexuality or anti-social attitudes, and mood disorders varying from elation and overactivity to depression, especially if accompanied by suicidal preoccupations and continued inactivity.

After recognizing the types of problems which require psychiatric treatment, the counselor must use effective referral and follow-up techniques. Referral is in itself a form of therapy in which both directive and non-directive counseling is used. As in handling emergency problems, a good approach is to consider methods used to induce a reluctant, resistant, or bewildered child to carry out a necessary task. Referral to a psychiatrist should be carried out in the same way as referral to a dentist or a surgeon. Children who have been properly prepared and whose parents have demonstrated their acceptance of the referring person or agent, enter such a new relationship willingly and naturally. Adults who have confidence in the counselor will accept his referral to a psychiatrist if the counselor's manner assures them that he would willingly go himself. If there is initial resistance, the referral must be made step by step with the aid of reassurance, non-directive probing, and suggestions bearing on the desired outcome of treatment. The counselor should indicate a willingness to consult with the specialist to whom the individual is referred, but only with his full knowledge and consent.

On certain occasions it may be necessary or desirable to make a written account of some of the information as it is obtained during the course of the interview. Records made in this way in the presence of the counselee should be limited to short notes, dates, figures, or objective facts which can be written in plain view. Sometimes a line diagram indicating the relationships between certain events animates discussion and adds interest to the interview. This at the same time furnishes a work sheet of useful information for the more complete record which is generally made after the interview. The permanent record should include a condensed summary of the problems presented, issues faced, issues unsettled, positive steps initiated, and referrals made. Functional notes of this type act as a quick memory refresher for use in follow-up interviews. In some instances it is helpful to indicate which aspects of the problem could be used as an effective entry in succeeding contacts.

Rules of Procedure in Interviews

THERE are a number of essential steps in conducting interviews which should constantly be observed and practiced until they become second nature. Some of them are actually little more than the basic good manners of interpersonal relationships on the counseling level. It is especially important that these measures be utilized in conducting initial interviews. It is obvious of course that the effectiveness of any interview is determined by many other factors besides adherance to set procedures, but such techniques are an inseparable part of the counseling process, and as Chesterfield said of the rules of good breeding, they not only adorn merit and ability—they may, on occasions, even make up for the want of it.

1. The tempo of an interview is often influenced to a considerable degree by the counselor's opening remarks. It is good policy to begin with some comment of a favorable nature which makes the interviewee feel he is noticed and appreciated for himself.

2. Be natural, informal, courteous, and attentive. Your undivided attention is the greatest compliment you can pay, and this will indicate a genuine, not a merely casual or forced interest in the interviewee and what he has to say.

3. See to it that the interviewee is comfortably seated and at ease, and show that you recognize the importance of privacy. Make him feel that he is in a consulting room, not on a witness stand. Delays in meeting an appointment and necessary interruptions should be explained briefly and considerately.

4. Show by your glance, manner and speech that your approach is one of plain dealing, that you employ no tricks or devices to impress others, that you have no ulterior purpose beyond helping those you serve to the limit of your ability. If necessary, make it clear that you are not going to "psychoanalyze" anvone against his will.

5. Do not assume that the proper counseling relationship is ready-made, even if the interviewee sought the contact. A certain amount of ambivalence can be expected, whether it is expressed or not. Show by your acceptance such indecision or reticence that it is not a bar to building up a worthwhile and helpful relationship.

6. Begin the body of the interview by encouraging the interviewee to talk out his problem and his point of view. Make him feel that as a counseling equal he has the privilege of telling his own story in his own way. Do not hasten a discussion of what you feel is the central issue without allowing the interviewee to talk first about the subject uppermost in his mind. You may need to ask a few questions for fuller information, but avoid side-tracking or interrupting him in the middle of his story.

7. While listening, seek to determine and remember what feelings lie behind what the interviewee is saying. Note if his prevailing attitude reveals friendliness, fear, insecurity, aggressiveness, defensiveness, withdrawal, mistrust, or hostility. Observe if he makes an effort to please, and to what extent he expresses a need for approval and reinforcement from others.

8. Be alert to physical evidences of emotion such as changes in the tone of voice, hesitancy or unusual reticence, flushing, restlessness, or impulsive movements. Observe which topics are prone to set off such manifestations. Slips of the tongue may sometimes be revealing, but should not be used as a basis for premature conclusions.

9. Encourage and invite the interviewee to discuss his feelings frankly, even though some of them are negative and even though they may be directed against his family, relatives, employer, previous counselors, or yourself. Try to gain an impression of what he avoids or does not want to talk about.

10. In the counseling interview, do not expect to talk more than 10 or at most 20% of the time yourself. Resist completely the temptation to talk at length or to tell lengthy personal anecdotes. Avoid excessive use of the personal pronoun "I." Except for necessary factual information or explanations, weigh what you say according to this criterion: Does it help the interviewee to say what he otherwise would not or could not say?

11. Questions of the "who-what-when-where-how-why" type are preferable to those which can be answered simply by "yes" or "no." Occasionally the yes-no type of question is useful when blocking occurs and it is desirable to ease tension by this means.

12. Never respond to a display of anger or resentment by becoming similarly disturbed yourself. Learn to accept and respect irritability or aggression without displaying impatience, even if this would be justified by ordinary standards. Remember that the emotionally disturbed or disagreeable interviewee is a very troubled or even a sick person.

13. Do not bias responses by asking leading questions, or by attempting to force answers. Never argue or indicate through your speech or facial expression that you strongly approve or disapprove of what the interviewee is saying or thinking.

14. Your approach should reveal an appreciation of the fact that as a rule human problems are complex and have not just one but several or many causes. Remember that you are dealing not only with a person who has a problem, but with a person who has both a problem and a history. Help him to gain perspective of the long-range aspects of his problem by inquiring carefully into its earliest beginnings.

15. When the interviewee makes a vague statement or a blanket generalization which reflects strong feeling but lacks specificity, ask him to give a definite example of what he means, as illustrated by some recent experience. Many emotional reactions can be clarified in this way by a discussion of examples.

16. When the interviewee has finished his spontaneous account, make an effort to guide his thinking into channels which throw light on other aspects and causes of his situation than those which he complains about or uses as the sole explanation of his difficulties.

17. Both in clarifying basic motivation and in guiding the interviewee toward a solution, the non-directive technique of mirroring basic emotions has a distinct place. This requires the counselor to concentrate on the feeling and attitudes underlying what is said, and present them for further clarification and amplification, using introductory phrases such as "You feel . . ." or "You really think . . ."

18. Do not be afraid of silence. Such moments when regarded as "expectant pauses" help the interviewee to collect his thoughts and make associations which might not find expression if the interviewer fills every gap in the conversation with comments and rapid-fire questions. Too much silence, of course, can become embarrassing and also interfere with rapport. At such times the discussion can be shifted to less emotionally charged topics needing clarification.

19. The release of emotion at any point in the interview may be accompanied by tears. Such an occasion also calls for a short period of respectful silence. Show by your attitude that you do not regard weeping under such circumstances as a weakness, but rather as an understandable expression of strong emotion Rapport is strengthened by this means, and after the inter

viewee has had a short time to compose himself, he is very likely to find it easier to talk.

20. Do not force the interviewee to reveal more than he wants to or is ready to tell. This warning should be observed particularly in the first interview. Afterward such individuals may become disturbed over having told too much, and the resulting self-reproach and resentment may destroy rapport.

21. The rate of progress in each interview should be dependent upon the interviewee's understanding and development of insight. Hurrying the individual or attempting to cover too much ground at one time often only results in confusion and discouragement. The more complicated the problem, the more it will have to be analyzed step by step. Efforts toward a final solution will similarly need to be formulated in piecemeal fashion. Remember you cannot make a tree grow faster by pulling it up by its roots.

22. Observe the five P's: don't patronize, don't preach, don't punish, don't prosecute, and don't probe too deeply or too fast. To this list may be added the injunction to remember that counseling does not mean handing out platitudes, and it is not to be confused with mere persuasion, no matter how eloquent.

23. Try not to precipitate situations in which the interviewee is encouraged to make false statements which he will later feel required to defend. While he is "feeling you out" and is still unsure whether or not to confide fully, he may not tell all of the facts, or may even include some untruths. Little is gained and much may be lost my reverting a challenging witness-stand type of cross-examination. Make the interviewee feel that while he may have reasons which at the time may seem to justify concealment, these apply no more to the counseling relationship than hiding symptoms from the doctor helps in the treatment of an illness.

24. Remember your responsibility never to disclose information given in confidence during a counseling interview. If under certain circumstances it is necessary to reveal confidential material to some other individual or agency, the reasons should be made clear to the interviewee, and his consent should first be obtained.

25. Recognize that in a counseling relationship a strong bond springs up between the interviewee and yourself, and that such talking through and sharing of feelings is a healing process in itself. Use it to increase the interviewee's ability to direct his own affairs, and make him feel that it must not be construed merely as a medium for dependency on you.

26. Avoid the dangerous pitfall of giving premature advice or promises. Make sure that both you and the interviewee understand all the important factors bearing on the problem before discussing what is to be done. Never commit yourself to a promise you may not be able to keep. Sometimes the only promise you can safely give is that you will continue to give every assistance possible in searching out causes and finding remedies for the problem.

27. Insure mutual understanding and progression during the interview by occasionally summarizing briefly what has been covered, and by asking if this statement gives a true picture of the problem as it has been developed up to that point. In this way certain issues are clarified and advanced toward a solution, even though they represent but part of the whole.

28. Adapt yourself to the slower pace of interviewees who seemingly do not want to talk or who are overly inhibited and reticent. Sometimes a remark such as, "Tell me what you think I should know about this," will be helpful in overcoming blocks due to embarrassment, suspicion, or fear.

29. When the interviewee seemingly avoids coming to grips with the issues in his problem, or if you have reached an apparent *impasse*, a good method is to review some of the main issues clearly and concisely, and to offer several alternate suggestions, such as contrasting short-range to long-range aspects, and inviting discussion of each.

30. Praise can be used effectively in interviewing, but it must not be overdone. It is usually best to restrict praise to actual and positive accomplishments, or to decisions which bear directly and unmistakably on a constructive solution.

31. Occasionally it is useful to frankly ask the interviewee if he feels that progress is being made, if basic factors have been uncovered, and if he feels he has been or is being helped. This shows your willingness to accept his judgment concerning the outcome of the contact, and that the benefit which he receives is and must remain one of the most important considerations.

32. Avoid giving any impression that you are infallible or that you expect to solve everyone's problems single-handed. When the necessity for securing outside help becomes evident, emphasize the past which other consultants, agencies, or personnel may play in assisting both the individual and yourself. Make it clear that you will be willing to consult with the proper person to whom the individual is referred, but only with his full knowledge and consent.

33. Before ending an interview, see to it that the main issues have been clearly formulated, preferably in the interviewee's own words, and that the next step is fully understood. Indicate what is to be done by the interviewee, what will be done by yourself, and what needs to be done by others. It is not usually wise for any single interview to extend over a longer time than one hour. When the need or desirability for a follow-up interview is established, a definite appointment should be arranged.

34. Even if a follow-up interview is not directly required, express your willingness to continue the discussion at a later time, should further developments or future progress make this desirable. It is often effective to "hit the iron again while it's hot" by seeking out the individual to inquire briefly as to his progress, after an interval of a few days. Counselor-initiated follow-ups of this type almost always meet with an appreciative reception, since they reflect your unsolicited interest.

35. Remember the key importance of the first interview, but do not expect it to accomplish more than a beginning in therapy, since it is of necessity given over largely to preliminary diagnostic considerations and explorations. Significant progress in therapy is usually not accomplished without a series of well conducted follow-up contacts. The spacing of interviews should be planned with an understanding of the fact that positive influences continue to operate and grow during the intervals between them.

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The Ramazzini Society

ALTHOUGH established in 1942, The Ramazzini Society because of wartime contingencies was not able to arrange its first meeting until May, 1946; this was held on May 17-20, 1946, at St. Clair Inn, St. Clair, Michigan.

One of the earliest established principles of The Ramazzini Society was that there should be no officers, but that each year one or more "servants" were to be appointed to carry on the necessary correspondence and other matters to keep alive the spirit of the patron saint RAMAZZINI among the members of the society.

Thus it became the duty of DRS. CAREY P. McCORD and CLARENCE D. SELBY to carry on these activities during 1942, 1943, 1944, 1945 and 1946.

Meanwhile the society developed its objectives and principles. As stated by some of the earlier members, there is no place for personal ambitions, for there are no officers or offices, no scientific programs, no by-laws as such, no dues, and, therefore, no funds to be disbursed.

In fact, one of the tenets of the society is to abolish the "ten-pound look, hair curlers, and pompous stuffed-shirtism."

It is realized that there are many others over the land, non-members, who are qualified by attainments and devotion, some of whom may later become members. The present roster is as follows:

Left to Right: Dr. Carl M. Peterson; Dr. C. O. Sappington; Dr. Andrew R. Riddell; Dr. Louis Schwartz; Dr. William D. McNally; Dr. Oscar A. Sander; Dr. Robert T. Legge

DR. JOSEPH CHARLES AUB, Boston.
DR. E. L. BELKNAP, Milwaukee.
DR. A. G. CRANCH, New York.
DR. J. G. CUNNINGHAM, Toronto, Ontario.
DR. CECIL K. DRINKER, Boston.
DR. JOHN H. FOULGER, Wilmington, Delaware.
DR. ALBERT S. GRAY, Hartford, Connecticut.
DR. EMERY R. HAYHURST, Columbus, Ohio.
DR. RUTHERFORD T. JOHNSTONE, Los Angeles.
DR. ROBERT A. KEHOE, Cincinnati, Ohio.
DR. A. J. LANZA, New York.
DR. ROBERT T. LEGGE, Berkeley, California.
DR. CHRISTOPHER LEGGO, Crockett, California.
DR. WILLARD F. MACHLE, New York.
DR. WILLIAM S. McCANN, Rochester, New York.
DR. WILLIAM J. McCONNELL, New York.
DR. CAREY P. McCORD, Detroit.
DR. WILLIAM D. McNALLY, Chicago.
DR. STUART F. MEEK, Detroit.
DR. PAUL A. NEAL, Bethesda, Maryland.
DR. CARL M. PETERSON, Chicago.
DR. ANDREW R. RIDDELL, Toronto, Ontario.
DR. OSCAR A. SANDER, Milwaukee.
DR. C. O. SAPPINGTON, Chicago.
DR. R. R. SAYERS, Washington, D. C.
DR. LOUIS SCHWARTZ, Bethesda, Maryland.
DR. CLARENCE D. SELBY, Detroit.
DR. HENRY F. SMYTH, Philadelphia.
DR. JAMES H. STERNER, Rochester, New York.
DR. W. F. VON OETTINGEN, Bethesda, Maryland.

During the past year the society was most unfortunate in losing one of its most illustrious members, DR. LEROY U. GARDNER, of Saranac Lake, New York.

At each annual meeting the principal activities will be a "communion of the spirits," with only one planned event, the annual RAMAZZINI Oration, which was given at the first meeting by DR. ROBERT T. LEGGE, of Berkeley, California, on "Bernardini Ramazzini: His Life, Deeds and Books."

THE 1947 meeting was held September 26-28 at Saranac Inn, on Upper Saranac Lake in the heart of the Adirondacks where mountains, sun and water supplied the beauties of nature.

Present were Ramazzinians CAREY P. McCORD, CLARENCE D. SELBY, CARL M. PETERSON, CLARENCE O. SAPPINGTON, OSCAR A. SANDER, LOUIS SCHWARTZ, STUART MEEK, ROBERT LEGGE, WILLIAM D. McNALLY, and A. R. RIDDELL, with DRS. LEONARD GREENBURG, FRANK FERLAINO, ARTHUR J. VORWALD, and MR. MANFRED BOWDITCH as guests.

The annual dinner was held Friday evening, September 26, after which DR. CAREY P. McCORD, the 1947 Ramazzini orator, gave the annual oration on the life and works of BENJAMIN WM. McCREADY, one of the first Americans to write on occupational disease, in 1837. The oration evoked considerable discussion concerning similarity to Thackrah's material in Great Britain.

Informality was then the order of the evening and the succeeding days, with friendly games of cards, shop talk, music by "SERVANTS" PETERSON and SAPPINGTON, walks on the trails, putting on the green—the latter producing close contests between the New York and Chicago contingents.

DR. LOUIS SCHWARTZ was unofficially appointed chief raconteur and RAMAZZINIANS SANDER and BELKNAP were made "servants" for 1948.

A pilgrimage was conducted to the grave of DR. LEROY U. GARDNER and plans were discussed for a suitable memorial.

On Sunday evening, September 28, at supper occurred the usual final convocation, with the majority of the group going to Saranac Lake for the 6th Saranac Symposium during the following week.

THE SECOND RAMAZZINI ORATION

BENJAMIN WILLIAM McCREADY, M.D. (1813-1892) *and his Essay* *"On the Influence of Trades, Professions, and Occupations in the United States in the Production of Disease"*

CAREY P. McCORD, M.D.,
Detroit

IN ANCIENT Peru and before the Spanish conquest, the custom of giving the dead royalty, festival holidays long existed. For reasons not fully determined, body preservation was somewhat readily accomplished, so that, in the catacombs, prominent persons dead for centuries sat about in formal fashion dressed as befitted their noble rank. On festival day their blood or political descendents readied their mummied progenitors, refurbished their finery, and marched the streets bearing their dead, ending the journey in the grand public square of Cuzco, where the dead chiefs acted as hosts at numerous sumptuous banquets. Since all dead, suitable for display, entered the procession of dynastics, the occasion partook of some of the qualities of a circus parade or Mardi Gras. Always there was just a little competition as to who was putting on the best show and who was getting the best acclaim.

In small measure is not that just our custom as to Ramazzini? Although he is accessible to our memories the year around, once annually we raid the tomb at Padua, burnish his appearance, if needed, then, with him hoisted on our shoulders, we dance through the halls of history more in affection than in reverence, more in the spirit of festivity than in adoration. Perhaps Ramazzini himself might be the first to demand that we look over others in the parade of the occupational medical nobility.

At this command of Ramazzini, and with your goodwill, I propose to appraise in critical manner the significance of the appearance in 1837 of a formal appraisal of occupational diseases in the United States by Dr. Benjamin William McCready, a physician and citizen of New York. However, this essay may not be detached from the period that produced it. Then before the publication and its author, let the era speak for itself.

The Coming of Democracy

THE period from 1820 into 1937 in the United States was prodigious. The people of the newly formed nation, while believing so thoroughly in liberty and freedom, had been so busy in two wars establishing these rights, that their actuality sometimes was doubted. Now it was proving real. These were the years of the new America and the new democracy. Land was to be had almost for the asking. Immigration was little restricted. Railroads and canals were threatening to outstrip migration. In 1820, no fewer than 60 steamboats plied the Ohio and the Mississippi. The country's population of 10,500,000 (1820) included the 2,500,000 already located beyond the Appalachians. In part this surge to the West was due to a temporary industrial letdown in the coastal areas. The country had lost its world trade due to war at home and abroad. Its substitute by manufacturing was under way but not achieved. The National highway had reached the State of Ohio. In 1830, Ohio had a population of a million, which was more than that of Massachusetts and Connecticut combined. The "Ohio fever" became an epidemic.

In that year the population of New York City was 242,000, but not until 1840 had the small trading station at Fort Dearborn sprouted into a bustling city of 5,000 people, known as Chicago. In 1823 the Monroe Doctrine appeared. Although the country by 1820 was in a foment of expansion, including industrial expansion, Sidney Smith in a tirade in the Edinburgh Review, wrote these famous words, "Who in the four quarters of the globe reads an American book? or goes to an American play? or looks at American paintings or statutes?—who drinks out of American glasses?—or sleeps in American blankets?" The American of the West replied in similar fashion, shouting carelessly over his shoulder, "We are busy just now, but just wait until we get these bridges built, these prairies farmed, that new constitution framed." America's later answer to Sidney Smith long has been embarrassing to the British Isles. England paid dearly for her flippant blindness.

Indeed in the 15-year period beginning in 1830, this country began to make amends for its earlier cultural shortcomings. Let it be recognized that this period marked the beginning of the public careers of Emerson, Hawthorne, Holmes, Longfellow, Lowell, Poe, Whittier, Bancroft, Prescott, Palfrey, Sparks, Kent, Story, Audubon, Agassiz, Dana, Gray and Maury. Webster's Dictionary first appeared in 1828.

The industrial revolution of England strangely enough spread westward to America rather than to the continent of Europe. There is some justification for saying that this country had no industrial revolution since its first upsurge in industry extensively derived from England's industrial revolution. Soon 100,000 persons were employed in the cotton textile industries on the Atlantic seaboard. Notwithstanding, 80% of all workers were still engaged in agricultural pursuits; the 20% of other workers were thinly distributed over scores of other industries—mining, lumbering, ship-building, metal trades, woolen and cotton textile production, railroading, tanning, construction, sailing and scores of others.

In the midst of comparatively high wages and abundant employment labor became much dissatisfied, and in some respects justly so. The work day was from 12 to 16 hours. One of the early conflicts centered about demands for a 10-hour day. In the new system the artisan had lost his old independence. He could not afford the costly machinery; therefore, he had to work for those who could provide such machinery, and had to join others in factories built around power. Labor was much concerned in the use of child labor, which left no time for schooling. Further, labor widely demanded free public schools. During this period the few public school pupils were regarded much in the same class as adults, forced into poorhouses. Better children attended private schools. Pauper children attended public schools. Labor at this time protested the endless jailing for debt. Up to 1830, about 75,000 persons yearly were jailed for debts. Labor unions had appeared before 1800. Strikes occurred in New York, Philadelphia, Boston and Baltimore by 1807. By 1825, labor unions were so well established as to justify their own publication. The years 1825 to 1837 saw the first real rise of labor in this country. Unions by 1836 had 300,000 members.

In order that we may never overlook the actuality of manufacture in the United States in the period mentioned, let it be noted from a bewildering mass of possibilities, that axes, picks, scythes, and other edged

tools, along with iron stoves, were in wide manufacture. In 1831 the McCormick reaper appeared. Planing mills revolutionized the wood industry. The Colt revolver was first manufactured in 1835. Firearms and ammunition were widely demanded. The manufacture of friction matches was introduced. Illuminating gas was first manufactured for street use in New York City in 1830. The Morse telegraph was invented in 1835. During the decade beginning in 1830, railroad trackage grew to 3,000 miles.

Thus far unmentioned in this recital is the period's chief symbol,—Andrew Jackson. As the 7th President, he began his two terms in 1828. All his predecessors had been of the gentry, Washington, Jefferson, Adams, Madison, Monroe and then Adams, the younger, were motivated by the concept that this country had been organized as a republic—republic in which the people *shared* in the government. Then along came Jackson with his slogan, "Let the people rule." Quickly the republican aristocratic concepts were thrown out of government. The day of the common man had arrived. Jackson consummated the common man's emancipation. The period was magnificent. Then swiftly, but not without omens, came the panic of 1837. A panic stemming from maladjustment of monies, improper banking controls. Gold and silver went into hiding, paper money depreciated in fantastic fashion, merchants failed, factories closed down, thousands were unemployed, starvation threatened. The labor movement was crushed. Everywhere was ruin.

In 1837, Van Buren, the ardent sponsor of Jackson, took office as President just in time to reap the economic whirlwind.

The Life of Benjamin William McCready

ALL OF the foregoing has been introduced to indicate the wealth of material available to the potential investigator of occupational diseases, occupational medicine, occupational hygiene and labor in the years 1835 and 1836. Although McCready's manuscript is dated January 3, 1837, it is known that the offer of a prize by the Medical Society of the State of New York was made in 1836—that is, during the height of economic activities and prior to the dire panic of 1837.

Before appraisal of the prize-winning dissertation, it may be well to introduce that which is known about its author, Benjamin W. McCready, M.D. It is astonishing that much less is known about his personality and activities and attainment than is known of Ramazzini —of a much earlier period. Much known of McCready's life may be found in Genevieve Miller's introduction to the McCready republication in 1943. The sources of her material are in turn authenticated. Even the spelling of the name McCready is in doubt, or at least varied. On the title page and many other places in the Miller publication McCready is spelled thus: "McCready." In like fashion it appears in Kober and Hayhurst. However, at the manuscript museum of the library of the New York Academy of Medicine, the name is written "M'Cready." In this style it appears in the Miller republication, at that point after a long introduction where the McCready text actually begins. This appears to have been merely a youthful affectation. Benjamin W. McCready was a native of New York City and spent his entire lifetime there. He was born on October 28, 1813, just one month after Perry's splendid victory on Lake Erie. He was of Scotch-Irish and Huguenot derivation. In high school he was a brilliant student and in languages almost a prodigy. His medical work was begun under Dr. John Brodhead Beck as preceptor. Later young McCready obtained his formal medical degree in the College of Physicians and Surgeons in New York in 1835, in his twenty-third year. One year was spent as house physician in the New York Hospital. It is noteworthy that his preceptor Doctor Beck was chairman of the committee concerned with the dissertation for which the prize had been offered. At a later time McCready served as a physician to the Tombs prison, although in practice and teaching at the same time. Apparently he was affiliated with various city dispensaries. He cooperated in the establishment of the New York College of Pharmacy, where he was a member of the faculty. With the creation of Bellevue Medical College in 1861, McCready became its first professor of materia medica and therapeutics. Altogether from 1848 until 1874, McCready participated in the activities of Bellevue Hospital in divers capacities. For a score of years this physician was the medical director of the Washington Life Insurance Company of New York. In this capacity he gained high repute for integrity in medicolegal work. At one period he was an ardent abolitionist.

The McCready manuscript was first published in the "Transactions of the Medical Society of the State of New York," volume 3, Albany, 1837, pp. 91-150. It is believed that the output was limited to 100 copies. As best determined the publication attracted scant attention and exerted no known influence near the years of publication. In 1943, this journal publication was reprinted in book form by the Johns Hopkins Press as one of the publications of the Institute of the History of Medicine of Johns Hopkins University. This reprinting includes a photograph of Doctor McCready made late in life and furnished by the New York Academy of Medicine.

Nowhere does it appear that Benjamin McCready was an industrial physician or pretended to be, or that he visited any substantial number of work places or consulted any large number of workers except as they came before him in private or hospital practice. Apparently his essay entry was written during his house physician service in the New York Hospital. He died in New York City at the age of 78, the year of his death being 1892.

Publications

HIS other publications and some others about him are now listed:

McCready, Benjamin William; Eczema, cases of. Read April 17, 1841, before the New York Medical-Surgical Society, N. Y., 1841, 9 1. M.S.

Lectures introductory to the course on materia medica and pharmacy for the term of 1850-51. N. Y. B. R. Barlow, 1850, 16 pp.

Memoir of John A. Swett, M.D. N. Y., Appleton, 1855, 38 pp.

To What Degree are the Intellectual Faculties Affected in cases of Apoplexy and Hemiplegia? N. Y. Journal of Medicine, N. S., V. 3, 1847.

Washington Life Insurance Co., To the Medical Examiners, by B. W. McCready, N. Y., 1871.

Neligan, John Moore, Medicines Their Uses and Mode of Administration. N. Y. Dean, 1819 (with additions by B. W. McCready).

On the Influence of Trades, Professions, and Occupations in the United States in the Production of Disease. Reprinting with biographical notes by Genevieve Miller, The John Hopkins Press, Baltimore, 1943.

Portraits

THE New York Academy of Medicine possesses within its archives various portraits of Doctor McCready, but all are said closely to resemble that one introduced into the Miller republication. Likewise, the New York Academy archives contain in manuscript form certain items of McCready's work.

The New York Academy of Medicine Prize Essays

THE Medical Society of the State of New York was organized in 1806. The first meeting convened in February, 1807. Although McCready is listed in that archive manuscript devoted to founders of the New York Academy of Medicine, obviously this does not refer to the founders of the Medical Society of the State of New York since McCready was not born until seven years after that body's creation.

The earliest reference found mentioning the Prize Essay series is in the Transactions of the Medical Society of the State of New York, for 1822, p. 10, where this note appears:

"Resolved, That a committee be appointed to take into consideration the utility of awarding prize questions by this society, and report at the next meeting; and that Drs. Wendell, Bay and Coventry, be that committee."

It is noted that the money for the medical prize fund was obtained by contributions from the various county medical societies which each contributed sums varying from two to five dollars annually. The usual prize was either 50 or 100 dollars.

During the next several years, these items appear in the Transactions:

"Transactions, 1824, p. 13.

Thursday, Feb. 5, 1824. "The Committee appointed to report prize Questions to this Society, and who are also by the terms of their appointment 'directed to offer at least five subjects, in order that the Society may select therefrom such as to them may be the most interesting'

"Report—

"That the following would be proper to offer as prize questions to the Medical profession throughout this state.

1. The History, Causes and Treatment of Whooping cough.
2. The History, Causes and Treatment of Croup.
3. The History, Causes and Treatment of Dropsy.
4. The Remote and Exciting Causes of Phthisis Pulmonalis.
5. The Medical Use and Effects of the Sanguinaria Canadensis.

"The Committee further report that the following regulations would be proper in offering the above subjects to the notice of the profession.

"1. That in treating of the disease mentioned above, it be required that particular attention be paid to their history, nature and causes in this state.

2. That the prizes offered be in each case Fifty Dollars.

3. That the Secretary give public notice of the subjects offered on or before the 1st of March next.

4. That the Dissertations offered for premiums be forwarded to Albany on or before the 1st of January next.

That they be accompanied with a sealed paper containing the name of the author, and that this sealing, as well as the dissertation be endorsed with the same motto, in order that the name of the successful author alone may be ascertained.

5. That (there shall be) a committee to examine and report on the Dissertations that may be presented.

6. That it be understood that the Society is at liberty to dispense with the adjudication of any premiums provided that the Dissertations presented to the Committee may not, by them, be deemed worthy."

1825: A Dissertation on the Remote and Proximate Causes of Phthisis Pulmonalis; to which the Prize was adjudged for the year 1825, by the New York State Medical Society. By Andrew Hamersley, M.D. etc.

Transactions..1835, pp. 316-378.

1828: An Essay on the History, Causes, and Treatment of Typhus Fever; to which the Annual Prize for the year 1828 was awarded by the Medical Society of the State of New York. By Alfred Y. Magill, M.D., of Winchester, Virginia.

Transactions...1835, pp. 95-176.

1830: An Essay on the History, Preparation, and Therapeutic Uses of Iodine. By Samuel J. Hobson, M.D., Member of the Philadelphia Medical Society, to which the Annual Prize for 1830 was awarded by the Medical Society of the State of New York.

Transactions...1835, pp. 261-315.

Note: A forword to the 1835 Transactions states:

"In consequence of not receiving sundry promised communications, the Committee of Publication have reprinted all the remaining Prize Dissertations in the present volume."

1831: Prize Dissertation (for 1831) on Delirium Tremens. By James Conquest Cross, of Lexington, Kentucky.

Transactions...1832, pp. 2-147.

1837: On the Influence of Trades, Professions, and Occupations, in the United States, in the Production of Disease. Being the Prize Dissertation for 1837. By Benjamin W. M'Cready (sic), M.D., of New York.

Transactions..1836, pp. 91-150.

Our interest in the series may terminate with the last mentioned; that is, the McCready Essay.

With respect to that item, two notes are pertinent:

In the Appendix to the Transactions, for 1836, p. 9, it states:

"The Committee on Prize Questions and Dissertations reported that no Dissertations had been offered during the past year.

"On motion, Resolved, That the following be the Prize Question for the current year, and that the sum of fifty dollars be offered for the best dissertation on the same.

"The Influence of Trades, Professions and Occupations in the United States in the Production of Disease.

"The following were appointed the Committee on the prize question for the current year:

Drs. John B. Beck,
James R. Manley,
Richard Pennell,
John Stearns,
John C. Cheesman."

From the Abstract of the Proceedings of the Society for 1837:

"The following report from the Committee on Prize Questions and Dissertations was read:

"The committee on Prize Questions report to the State Medical Society that they have adjudged the prize to the dissertation of which Benjamin W. M'Cready, M.D., of New York, is the author.

John B. Beck, Chairman.

"The above dissertation was read, and on motion, referred to the Committee of Publication."

It may be observed that the concept of the need for inquiry into occupational diseases and kindred matters in the United States derived not from McCready, but from the State Society's Committee.

The Prize Essay

McCREADY'S fame in the world of occupational medicine rests not on any high merit of his own achievement, but solely from the fact that it was the first. Highly pertinent to the entire situation is the fact that in 1831, Charles Turner Thackrah, of Leeds, England, pubished in London and shortly thereafter in Philadelphia, his book entitled, "The Effects of the Principal Arts, Trades, and Professions, and of Civic

States and Habits of Living, on Health and Longevity." McCready made use of Thackrah's material and frequently gave credit by name to this previous writer. As Miller notes, the similarity between Thackrah and McCready is significant. At many points McCready but rearranged Thackrah's language. For our own appraisal, comparison is made in the language respectively employed in only two instances.

Thackrah writes:

"Carvers and guilders are kept in a confined atmosphere, and often for long periods in a leaning posture. Hence they sometimes suffer from headache. Though the pallid appearance, general among these workmen, indicates a reduction of health and vigour, life is not abbreviated in a marked degree."

Now writes McCready:

"Carvers and Gilders have a sedentary occupation, and too often work in a confined atmosphere. They are generally pale, and have an appearance of languor and ill health; they are not, however, subject to any injurious agencies except those caused by the sedentary nature of their employment."

Thachrah on Coopers:

"Coopers have good muscular exercise. When lads enter the employ, the stooping posture affects the head, and the noise, the hearing. This, indeed, is often permanently, though not greatly impaired. The men are annoyed also by pain in the loins, the result of posture. On the whole the employment is healthy."

McCready on Coopers:

"Coopers have sufficient exercise, and are not subject to dust, or other noxious agents. The nature of their work, causes them to stoop a great deal, and this in those unaccustomed to it induces pain in the back. The employment is healthy."

Without malice there is reason to suggest that many portions of McCready's prize winning essay are but adaptations of the language of Thackrah's shortly antedated better publication.

McCready introduces into his manuscript as its most engaging part, Doctor Folt's record of the tragic happenings on board the Potomac, which earlier had been published as an appendix to "Reynolds' Journal of a Voyage Around the World."

The McCready manuscript, which consisted of only 60 pages, is loosely divided into four sections representing 31 employments. The first of these is concerned with outdoor work such as agriculture, construction and sailing; the second is devoted to textile workers; the third to various miscellaneous trades, and the fourth to professional workers. Although some items reveal no influence of Thackrah, McCready is at his worst when on his own. Ramazzini seemed to have possessed a shrewd capacity for anticipating the disclosures of subsequent centuries. McCready, on the other hand, often lends emphasis to the very items that further advanced science disclaims in toto. For example, he states, "In no country have such frequent proofs been met with as in our own, of the fact, that lands which in a state of nature are tolerably healthy, are productive of disease when first brought under cultivation. At the West, the clearing of the rich and teeming soil, perhaps never before broken by the hand of man, is almost invariably followed by the appearance of remitting and intermitting fevers—." On the other hand, McCready atones for many of his faulty observations with other sagacious ones. For example, he notes that which is so well acknowledged in the year 1947, "The dress of females in this city is generally insufficient during the cooler months." In that section devoted to textiles, emphasis is chiefly directed to undesirable atmospheric conditions. The third section, concerned with artisans, seems near limited to those trades that might have been observed in the built-up portion of New York City. The number includes tailors, shoemakers, dressmakers, milliners, printers, butchers, blacksmiths, gold beaters, carvers, guilders, carpenters, cabinet makers, coopers, night watchmen and painters. Even so early as 1836 some persons seemingly had gained the impression that the world is bounded by the East, the Hudson, the Harlem Rivers and the Atlantic Ocean. McCready's presentation of the exposures of artisans is amazingly provincial. In the last section professional workers are accorded McCready's appraisal. The number includes the minister, the physician, the attorney, the professor and the literary man. It is conceded that they suffer from certain sedentary afflictions, mental and nervous strain and hypochondriasis.

On January 3, 1837, two days late, by the rules of the State Medical Society, McCready, then 23, and house physician in the New York Hospital, submitted his essay to his own medical preceptor, who was chairman of the essay committee. Promptly he was awarded first prize, and there appears to be no record of other contestants.

Appraisal

JUDGED by McCready's own writings as found in his book, it would appear that foremostly he is the humanitarian, the medical social service worker, much less the investigator of occupational disease. At every opportunity display is made of the worker as an alcoholic; the victim of low morals; the low level of housing conditions; the ill effect of long hours.

Even though McCready may be freed from even mild charges of plagiarism of Thackrah's material, it becomes an unhappy circumstance that this young physician could not have grasped the remarkable opportunities that his very decade provided—namely, the rise of labor; the sudden expansion of industry; the effect of the English industrial revolution; the effects on labor and industry of nationwide male white suffrage; the enormity of happenings beyond the Appalachian Mountains. In all these things McCready failed, but at no time did he pretend to be the industrial physician, to have investigated industry, or to be other than an essay writer and prize winner.

Reverting now to Ramazzini, let it be acknowledged that it would be highly satisfactory to have in the United States a homage-deserving Ramazzini prototype. With all credit to McCready for being the first in the land, he still fails to stand tall, alongside the old master, Bernadino Ramazzini.

Serological Tests for Industrial Workers

WALTER CLARKE, M.D.,
Executive Director,
American Social Hygiene Association

THE inclusion of the serological test for syphilis (STS) as a part of the medical examination of applicants for employment and of employees after absence or periodically has become during the last 25 years increasingly accepted by large industries as desirable from the points of view of the employer, the workers and the public. It is the purpose of this article to report a study indicating growth since 1933 of blood testing and related practices as applied to industrial workers.

Obviously the STS is merely one item in a program for combatting syphilis in the industrial population for the benefit of the workers, the employers and the public. It is by means of the STS that most cases can be discovered and treated. From the point of view of

the health authority this is a valuable case-finding device preventing the spread of disease and the late disastrous results of untreated syphilis, so costly in taxes for institutional care. From the point of view of the employer, it provides the opportunity to preserve the health of valuable personnel and reduces absenteeism and labor turnover. From the point of view of the worker, it often means longer life, more years of productive employment and the protection of his wife and children.

There have been many difficulties in the path of progress in extending the routine STS in industries. These have come to my notice in the course of many studies of and consultation services for large industries. In the early years serological laboratory services of state and local health departments were not sufficient to provide free blood testing for large numbers of employees. It was necessary to enlighten the workers so that they ceased to feel that their morals and characters were impugned by inclusion of a blood test for syphilis in physical examinations. One of the hardest problems to solve was the misguided insistence of industrial management that personnel officers and other laymen be informed of the diagnosis of syphilis in an employee. This of course would be unnecessary, unethical and illegal, and is impossible in good practice. Often the first inclination of management was to reject an applicant or to discharge an employee found to have positive STS. The workers themselves sometimes objected to blood testing because they feared—and not without reason in some instances—that blood testing might be used as a method to get rid of personnel who were annoying to management. Sometimes labor relations have been disturbed when workers, knowing or imagining a fellow employee had syphilis, have refused to work near him fearing infection through the common use of tools, eating utensils or toilets.

To some extent these difficulties have been overcome. Tax-supported laboratory facilities for STS are now generally available and the quality of service is greatly improved. Popular educational activities of the past 10 years by the U. S. Public Health Service, the state and local health departments, the American Social Hygiene Association and its affiliates have enlightened a large part of the public and removed many false fears. Such activities are, however, still quite necessary, and the social hygiene associations and health departments are carrying on a program of education, especially through the labor press. Labor organizations are very receptive to this type of information which they know is offered for the benefit of the workers, their families and their communities.

Great influence was exerted by the report of a committee set up by the U. S. Public Health Service in 1942. This committee included in its membership representatives of agencies interested in the subject.* The committee took a broad view of the problem of syphilis and gonorrhea among industrial workers who with their families constitute a large part of the total population.

After carefully considering the medical facts and practical experience the committee formulated a statement of principles regarding venereal diseases as an industrial health problem which should guide all concerned in the health of workers.

*"Recommendations to State and Local Health Departments for a Veneral Disease Control Program in Industry," by OTIS L. ANDERSON, M.D., Surgeon, U.S.P.H.S., Washington, D. C., Chairman; WALTER CLARKE, M.D., New York; WALDEMAR C. DREESSEN, M.D., Surgeon, U.S. P.H.S., Washington, D. C.; EMERY R. HAYHURST, M.D., Columbus, Ohio; EDWARD C. HOLMBLAD, M.D., Chicago; and CARL M. PETERSON, M.D., Chicago. Published by INDUSTRIAL MEDICINE, November, 1942. Single copies of reprints of this article may be had on request from the American Social Hygiene Association, 1790 Broadway, New York 19, New York.

"The Company Sent Me"

CHRISTOPHER LEGGO, M.D.,
Medical Director, California & Hawaiian Sugar Refining Company, Stockton, California

"THE COMPANY sent me! They should pay this bill!" How often has the plant physician heard this challenge several weeks or months after he has referred an employee to an "outside"[1] physician for a non-industrial condition?

To meet this problem, the author has been using the form which accompanies this article and has found that its introduction has practically eliminated these embarrassing situations and has well prepared him to meet these rare occasions when they might occur.

Since the forms are procured in pads, the use of a sheet of carbon paper has made a copy for the employee's folder readily obtainable.

The employee is almost invariably allowed to read what is written on the form so that he has a full understanding of the conditions under which he keeps his appointment, or makes the visit. Only after he has read it, as a rule, is it placed in a sealed envelope with the doctor's name and address, and the date and hour of the appointment written on the face of the envelope.

We suggest that those who are interested in trying this procedure modify the form to suit their own health benefit plan and/or[2] compensation situation and mimeograph a number for experimental purposes. On the basis of their experience with the mimeograph form, they may decide to have pads printed after any modifications which seem desirable have been incorporated.

1. This situation will occur whether the physician is the employee's own family physician or a general practitioner or specialist whom the plant physician assists the patient in selecting in the absence of a regular family physician.

2. The wording in this particular form in regard to "evaluation of condition in order to assist in determining question of liability under the Compensaton Law" will be entirely inappropriate in those states, such as Ohio, where no charges will be paid unless the case is accepted as industrial.

_____ 19____

To: Dr._____

_____ Phone_____

Our employee_____ No._____

has been advised to consult you because of:

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☐ (2) For evaluation of condition in order to assist in determining question of liability under the Compensation Law. Please send report and bills to the State Compensation Insurance Fund, and a copy of your report to the undersigned.

HISTORY: _____

_____

_____

REMARKS:_____

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Should for any reason prompt communication with us be desirable, please telephone collect to Crockett 360.

_____M. D.
Medical Director

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Future Industrial Medical Practice

IN THE *American Journal of Public Health* for October, 1947, there is a well-written and well-documented article entitled "A Future for Industrial Medicine," by Dr. Leonard J. Goldwater, Professor of Industrial Hygiene, Columbia University School of Public Health. This article is supplemented by an editorial, continuing the discussion, on the subject "Administrative Problems of Industrial Medicine." All who are interested in any phase of industrial medical practice should take the time to read both the article and the editorial carefully.

Before proceeding to a discussion of certain of the points in the article and the editorial, it seems desirable to call attention to various peculiar impresions and subsequent confusion which have arisen from some of the concepts relative to the practice of industrial medicine and its administrative problems. These are based upon some of the experiences encountered in a recently completed two-year field study of industrial health department functions and relationships, sponsored by the Industrial Hygiene Foundation of America, Pittsburgh.[1]

First are the frequent instances indicating that there is still prevalent considerable misunderstanding and confusion regarding the specific meanings of the terms "industrial hygiene," "industrial medicine," "industrial health," "industrial safety," and "industrial sanitation." Although it would be expected that such confusion would occur mostly in small plants (especially where the safety engineer may be responsible for industrial hygiene, industrial safety, and industrial sanitation), considerable incidence of this condition and misunderstanding was found in medium-sized and large groups. A clarification of these terms would be highly desirable, since also this condition seems to be reflected in both the article and editorial mentioned. It is obvious that these terms do not all mean the same thing, although they do overlap in some particulars. Too long, however, have they been used synonymously in many instances of writing and speaking. It is of importance, therefore, that before any progress can be made with respect to intelligent discussion of industrial health administration, appropriate nomenclature should be adopted.

Another problem which presented itself before the making of the two-year field study mentioned, is the concept that before outlining what things are necessary in an industrial health program for any given plant, it would be appropriate to know what is being done by industry in general in various sections of the country, in different sizes of population groups in plants, in various types of communities, with reference to the kind of manufacturing, and the other factors which affect the type and extent of an industrial health program. It was for this reason that the two-year field study was done—in order to find out what is going on in industry with respect to health programs as a first principle, before delineating what should be done in certain plants. Moreover, it was decided that this information should be developed through personal contact, through visualization of the plant andd its facilities and through conferences with plant officials and medical staffs. This would seem to be of a great deal more value than writing an article, containing merely a review of current literature.

A concept which naturally follows the two just stated, and which was derived from the results of the field study, relates to the fact that an industrial health program must of necessity be flexible and adaptable, because of the many differences in the actual needs of the different plants—further, that optimum results can only be obtained by "tailoring" the industrial health program to fit each establishment after adequate firsthand study of the group, materials, processes, equipment, products, community relationships, and the many other factors which enter into the over-all picture of industrial health program needs.

Dr. Goldwater's article quotes the scope and objective of industrial medicine from a number of different sources, including statements from the Council on Industrial Health of the American Medical Association, the American College of Surgeons and various individuals. It is evident, however, that after quoting all these definitions as to scope and objectives, Dr. Goldwater comes to the conclusion that the American Medical Association would restrict the activities of the plant physician to little more than case finding, sanitary inspections, health education, and first aid work. He continues: "If all treatments except first aid are to be given in the offices of private physicians, an unreasonable amount of production time would be lost while the injured, but not necessarily disabled, employee is traveling to and from the doctor's office and awaiting his turn to be treated. This would place a serious financial burden on industry and would discourage the employment of industrial physicians. Certainly,

1. "Trends in Industrial Health Administrative Practices," Progress Functions and relationships,' by C. O. Sappington, M.D., (Dr. P.H.—) Report of a Two-Year Field Study on 'Industrial Health Department —reprinted from Proceedings of the Eleventh Annual Meeeting of the Industrial Hygiene Foundation of America, Mellon Institute, Pittsburgh, November 7, 1946.

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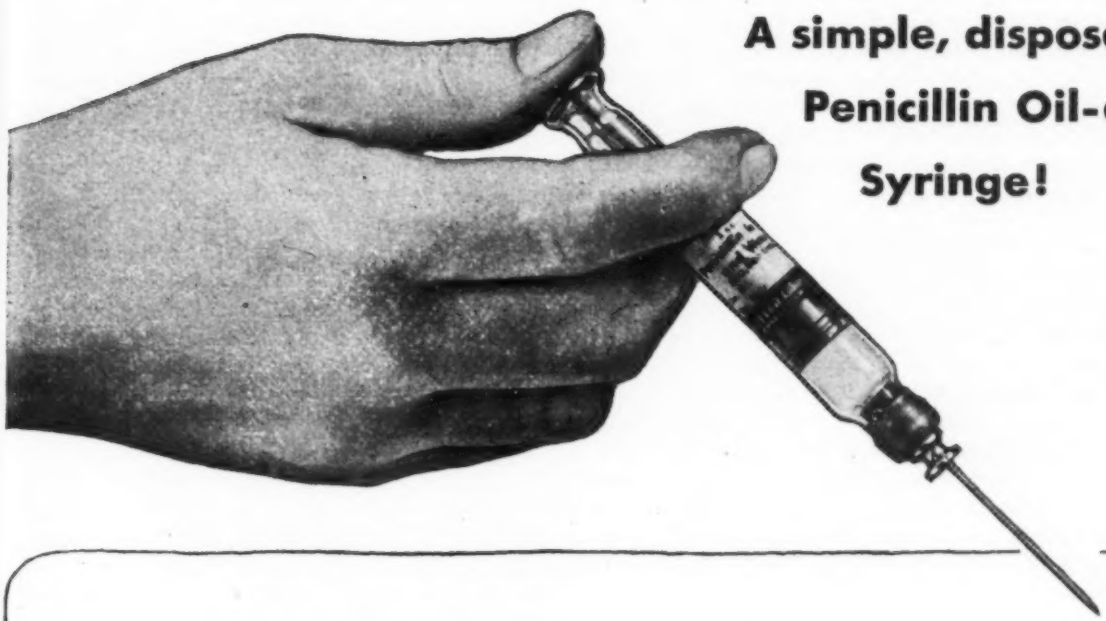

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few employers could be made to see the point of view of hiring a physician one of whose main functions would be to send employees to other physicians whenever any medical attention other than first aid is needed." This is, in fact, contrary to custom at the present time—the present conception in most industrial establishments is to provide "medical and surgical care to accomplish prompt restoration to health and earning capacity following industrial accident or disease," which is taken directly from the statement of the Council on Industrial Health of the American Medical Association published in 1940, which is quoted at the beginning of the article under the heading of "Scope and Objectives." Moreover, in most states there are legal provisions which require the employer to carry out these activities.

In developing the thesis of the article, this statement is made, "There are of course many types of medical practice groups, but fundamentally they represent a form of medical teamwork functioning for the benefit of both patient and physician. Since the future of industrial medicine is inseparable from that of medicine in general, it is natural to expect group practice to be applied to the former in at least the same degree as to the latter. The same principle applies to prepayment for medical care and to all other current developments in the practice of medicine." One of the best examples of teamwork occurs in industrial medical departments at the present time, composing as it does one or more physicians, one or more nurses, one or more industrial hygienists, chemists, engineers (as well as oculists, dermatologists, psychiatrists), who combine their efforts for "the restoration and conservation of health in relation to work, the working environment, and maximum efficiency—involving prevention, recognition and treatment for occupational disability and requiring the application of special techniques in the fields of rehabilitation, environmental hygiene, toxicology, sanitation, and human relations," which is quoted directly from a recent statement of the Council on Industrial Health (February 9, 1947) in defining occupational medicine, and which forms a part of Dr. Goldwater's review. Perhaps this development of teamwork in industrial health departments has not reached the same wide application of group practice as ordinarily found in medicine, but there are good examples of it and it appears to be increasing in use.

The latter part of the quote from the article, noted above, refers to the application of pre-payment for medical care to industrial groups, and is supplemented by a further statement, as follows: "The combination of pre-payment and group practice would seem to offer great possibilities for achieving these goals (maintaining and improving the health of employees as an essential in maximum production). Under such a system the industrial physician will take care of those medical problems which can be more efficiently handled at the place of work, referring the more complicated cases to appropriate members of his medical group. The patient thus obtains the benefits of teamwork medicine without the disadvantages of divided responsibility. The illogical and undesirable situation of having one doctor responsible for illness resulting from work and another for non-industrial illness is eliminated." It seems obvious that what is meant here would lead to over-all medical care for employees and possibly, for their dependents, since examples of such schemes had been previously described in the article.

The editorial mentions "at least seven more or less distinct functions" involving the promotion of industrial health, which may be briefed as follows: (1) provisions of a healthful environment; (2) education of employees; (3) pre-employment examinations; (4) prompt diagnosis, either of occupational or non-occupational conditions; (5) first aid; (6) treatment of disease on a non-emergency basis; and (7) rehabilitation.

It is stated that "there is a certain essential distinction between the first two and the last five of the specific functions listed above. Provision of healthful conditions within the factory walls and educational adjustment of the individual worker to those conditions are primarily problems of the industrial community itself. We may perhaps visualize as a promising avenue of approach a program in which a specialist in industrial hygiene would be primarily in charge of these functions. In a large plant he would be responsible to management—or better, to a joint committee representing management and labor. In small plants, he might be an employee of the local health department, preferably with an advisory committee representing labor and management. The other five functions, from pre-employment examinations at one end of the chain to rehabilitation at the other, involve problems primarily related to the individual worker. They could ideally be performed by a group practice unit of the medical profession acting under a pre-payment plan. The preventive and curative aspects of the program should be tied together, however, by the cooperation of the specialist in industrial medicine as an associated member of the group practice unit. Where the group practice unit has sufficiently far-sighted medical administrative leadership, the group might, on its own initiative, supply to the industry its preventive as well as its curative service. There is no single, perfect solution of this problem now in sight. There is rather a challenge to the inventiveness of management, labor, the medical profession, and the public to find *empirically* (italics ours) the best plan that will fit a given local situation. For management and labor, the need for cooperation in the meeting of a common problem is called for rather than insistence on vested interests. For the medical profession, it seems certain that the principles of group payment and group practice must be essential to any sound solution. For the public health authorities, leadership in research, formulation of reasonable standards of attainment, and assistance to small industries, where desirable, would appear to be the appropriate role."

Although some of these suggestions seem very wise, others are questionable. Prevailing opinion throughout industry is that it should not, in general, assume the responsibility for over-all medical care for its employees and their dependents, although this is done to good effect with sanction in some isolated communities. The assumption of such responsibility would incur such great financial outlay that it would be impracticable in many instances—and furthermore, it is questionable whether this would be satisfactory to industry, employees, practicing physicians in the community, or organized medicine, especially in urban areas where adequate private facilities are readily available.

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*Long, C.-F., M.D.: Edrisal in the Management of Dysmenorrhea, Indust. Med. *15*:679 (Dec.) 1946. Indust. Nurs. *5*:23 (Dec.) 1946.

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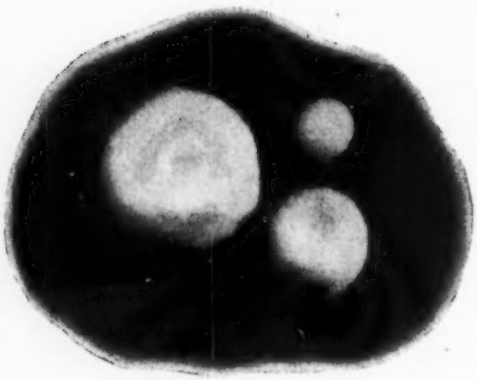

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†*Jackson, P., and Schuck, C.: Dietary Habits of Purdue University Women, J. Home Econ. 39:334 (June) 1947.*

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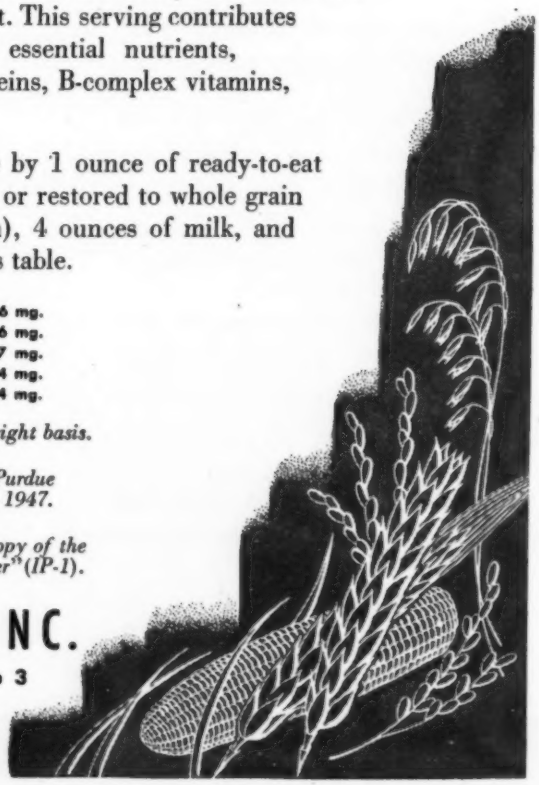

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Industrial Medicine and Surgery

—Abstracts of Proceedings of the Joint Annual Meeting of the Central States Society of Industrial Medicine and Surgery and the Chicago Society of Industrial Medicine and Surgery, held in conjunction with the Illinois State Medical Society Annual Convention, Chicago, May 13, 1947—

Reported by
C. O. SAPPINGTON, M.D., Dr.P.H.

THE morning scientific session of the CENTRAL STATES OF INDUSTRIAL MEDICINE AND SURGERY and the Chicago SOCIETY OF INDUSTRIAL MEDICINE AND SURGERY was held at the Palmer House, Chicago, Tuesday, May 13, 1947, with DR. MELVIN L. HOLE and DR. KARL G. RUNDSTROM, the Presidents, presiding, and DRS. ROBERT M. GRAHAM and CHARLES DRUECK the Program Chairmen.

The afternoon meeting was a joint session with the Surgical Section of the Illinois State Medical Society, of which DR. JOHN BEVERLY MOORE was Chairman and DR. HARRY A. OBERHELMAN, Secretary.

Morning Scientific Session

DR. JAMES HERBERT MITCHELL ("Fungus Infection of Skin in Industry") gave a lantern slide demonstration of photographs of various types of fungus lesions, located in different parts of the body.

There were examples of fungus diseases of the feet and of the hands, which are usually found on the flexor surfaces, but occasionally occur on the extensor surfaces. Supplementing these were microphotographs of the epidermophyton and pictures of cultures; with a photograph of so-called "dobe itch" on the hands of a dishwasher.

There were also photographic examples of conditions simulating fungus disease, including a streptococcus infection of the hand and foot, impetigo of the feet; streptococcus infection of the ear; sterile pustules of the foot and the same lesions on the palm; staphylococcus infection of the palm; infection of the nails; psoriasis of the hands and nails, and so-called gymnasium itch (inguinal).

Lesions of monilia albincans infection between the fingers were shown (one in the third interspace of an obese woman), also one slide of infection of the fourth interspace, and the other interspaces. Monilia of the feet was also illustrated showing its attack in a similar manner on the interspaces. There were examples of eruptions of the interspaces, nails, and subpectoral regions, which are usually found in diabetics and microscopic photographs of monilia in cultures were presented showing the staining of the cultures, and ringworm of the scalp.

Experiences were detailed with many compounds supposed to kill fungi, but none was quite as successful as phenyl mercuric salicylate which is very irritating but can be incorporated in a mixture.

It was emphasized that self-treatment produces difficulties many times with regard to these lesions, and there were several slides showing the results of self-treatment in lesions of the fingers and the use of formalin.

DR. EDWARD L. COMPERE ("Diagnosis and Treatment of Low Back Pain") emphasized the necessity of remembering that there is a strain on the lower portion of the spine because of the upright position.

Ruptured disc has been a very frequent diagnosis in many different places; the most common diagnosis encountered in the office of the essayist (associated with sciatica) was inflammation of the apophyseal joint of the spine; there is an acute muscle overload. Also there were examples of spondylolithesis, arthritis, metabolic disturbances (gout), backache being the most common cause for an examination.

Breck and his associates examined 450 applicants for employment, the x-ray showing significant abnormalities in 31% without complaints; 15% of this group were denied employment because of serious abnormalities.

There is a great deal of variation in the examination procedures; roentgenologists should make a 35° film to give a clear view of the lumbosacral joint; oblique views may be taken for showing the facets. Laminographs are

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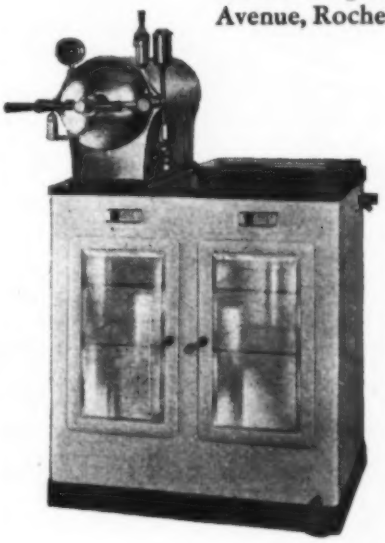

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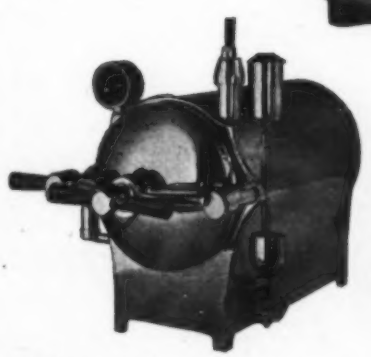

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used more at the present time and are quite helpful, although they are used more in the east than in this section of the country. Pantopaque gives better results for myelography—air is not considered as good.

DR. COMPERE did not consider physostigmin or curare helpful except postoperatively; he preferred 1% procaine injections around the facets for spasm and pain.

Lantern slides of x-rays of the lumbosacral spine were exhibited showing poor and good body mechanics; there was also a slide of a long outline of causes of back pain.

Emphasis was placed on the importance of the intervertebral discs as cushions (shock absorbers) and as hydrodynamic factors in strains or shocks; the loss of the disc is a definite defect in the dynamics of the spine. Back support of proper and adequate type, however, will make the patient comfortable.

X-ray photographs of extruded disc cases were exhibited and explained, with history of the operation; an interlaminate fusion is advised, this helping to prevent arthritic changes.

Many patients can be relieved by conservative measures, but the intractable type should have the lesion localized, followed by operation and fusion for stabilization.

DR. HAROLD H. STEINBERG ("The Cardiac Case in Industry") stressed the fact that the attitude of not employing subnormal applicants has now been changed by job evaluation and placement. The cardiac has a dynamic not a static condition.

The problems presented are: (1) placement and supervision; (2) early recognition of disability; (3) accurate diagnosis of emergency conditions; and (4) return to work after adequate convalescence.

In placement, the physician should understand job demands, and a list should be obtained from the employment department; prognosis should also be understood and the proper use of graduated exercises.

Overemphasis on murmurs should be avoided. Two blood pressure readings can be taken, one at the beginning and one at the end of the examination, or the applicant can be recalled for an additional reading. Masters found that 41% of males and 51% of females had readings over 150/90.

Willius was quoted as saying that coronary events do not occur from trauma only, in the presence of normal vessels.

The periodic examination presents a good opportunity to check employees; a complete laboratory program should be outlined; an electrocardiogram is advisable, it has been found, in more and more instances; the readings should be done by those with sufficient experience.

A plant medical department was described in which a central department has electrocardiograph facilities. In the experience of this group, there were 74 persons with hypertension, these being placed in almost all types of jobs except exposure to moving machinery, care being taken that the jobs were at ground level. Of this group of hypertensions, 45 had lost no time in 10 years, although 19 had experienced some lost time. There were four cases of acute attacks seen recently, and seven employees with aneurysms were now working.

All cardiacs are examined once a year routinely, a chest film and urinalysis being part of the examination. These persons are carefully supervised on their jobs and job transfer is not often recommended. In those cases experiencing absence from work, a consultation is held between the attending physician and the industrial physician upon return to work, concerning placement and job requirements.

In summary, an approach to the problem has been described, based on medical experience; cardiacs require constant supervision which, in turn, facilitates employment.

DR. JOHN T. REYNOLDS ("Vascular Disorders of the Lower Extremity") said that fatal pulmonary embolism is now considered a preventable calamity through proper ligation procedures and the judicious use of anticoagulants. In this program, any disease predisposing to disability should be controlled.

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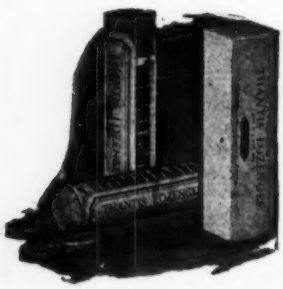

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The anatomic factors tending to develop thrombi were discussed, emphasis being on stagnant circulatory areas because of muscular compression; the most common places are around the malleoli, in the region of the calf, popliteal vein and lower femoral vein.

Checking points of occurrence may be accomplished by carefully squeezing the calf and thigh; by testing through tensing the muscles; and by looking for tender areas.

The question of ligating in patients with symptoms always occurs; after the proper use of anticoagulant, the tendency is to ligate if there is no distinct improvement. One must look for evidence beyond where the signs are, especially in the so-called silent thrombus. In this respect, one should always keep in mind a swollen and tender ligament accompanied by fever.

The superficial femoral vein should not be ligated when the deep femoral vein is thrombosed; establishment of free collateral circulation is the objective. The superficial femoral vein is usually ligated, but if symptoms are higher, the common iliac may be ligated.

Decision as to whether anticoagulants or ligation is the choice depends upon the individual case and on the observations made—much study and thought are necessary. Ordinarily one tries anticoagulants and makes observations, but severe anticoagulant therapy is to be avoided.

DR. PAUL W. GREELEY ("Plastic Reconstruction of the Thumb") discussed four acceptable methods: (1) the deepening of the web between the first and second metacarpals, which may, however, be inadequate for good grasping; (2) the rotation of the index finger to the stump of the thumb—but one hesitates to sacrifice a good index finger; (3) the substitution of a toe for the thumb by means of a pedical flap, which however may be uncomfortable; and (4) the lengthening of the existing stump by a pedicle from the abdominal wall, this being sutured to the raw area on the hand with no thumb; bandage being placed around the abdomen and the shoulder girdle, later on the pedicle being cut and the hand and abdomen bandaged; then one bares the end of the 12th rib, removing it and inserting it into the pedicle graft, after drilling holes into the surface of the rib. The thumb is protected with a covering until the skin sensitivity returns.

A motion picture was shown illustrating the technique, and instances were also exhibited showing residual stumps necessitating less bone and pedicle flap than others.

Afternoon Scientific Session

DR. WAYNE B. SLAUGHTER ("The Timing of Plastic Repair in Congenital Anomalies") stated that hair lips and cleft palates were the most common anomalies encountered.

Lantern slide demonstration was given, emphasizing the fact that a two-year period was chosen arbitrarily for operation for cleft palate, although not all cases should be operated. An early operation on a young boy was illustrated stressing the principle that it is a good idea to close the lips early. Photographs were shown also of the nose, ears, moles, portwine marks, and other types.

In conclusion, the greatest needed factor in the therapeutic program is properly-timed surgical intervention.

DR. GEZA DE TAKATS ("The Indications for Lumbar Sympathectomy") stated that this operation is now a simple standardized procedure—the pendulum has now swung the other way—there are many cases that do not need such an operation.

Before operation, it is advisable to test reaction to sympathetic block, walking ability and venous filling time.

After sympathectomy, vascular exercises are more effective and there is no standing constriction. Operation was described to remove the second and third lumbar ganglia.

Examples of cases were then given, including a case of hyperidrosis; a case of causalgia in which there had been an injury to the wrist and the case was seen four years later; if this case had had a sympathectomy two to three weeks after the injury, the condition would be different. Cases were also described of thrombosis of the foot, and a case of Buerger's disease of the feet, the latter of which

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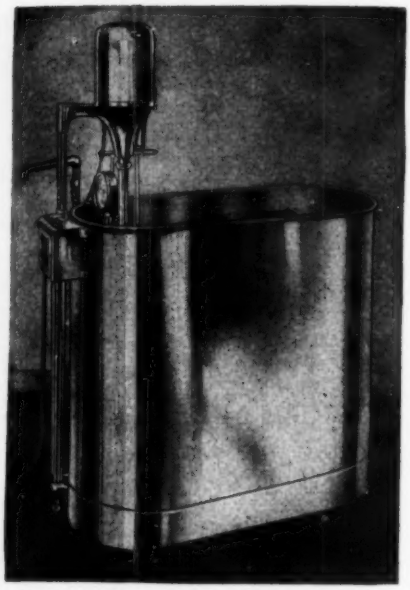

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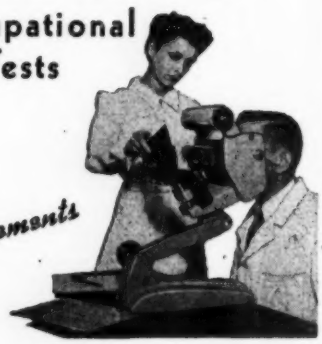

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was operated after the acute stage. In a case of arteriosclerotic gangrene of the toes, sympathectomy lowered the level of amputation.

Other indications were cited, as Raynaud's disease in which there is mottling of the skin, and trench foot; not all cases however, are suitable. For example, those types showing much numbness on walking will not do so well.

DR. ARKELL M. VAUGHN ("Early Ambulation in the Surgical Patient") stated that Reece in 1891 advocated this procedure and there has been a recent trend in the popularity of the procedure since the work of Leithauser.

The third day has been arbitrarily set for postoperative rising which helps to restore the vital capacity, increase the negative pressure of the lungs, and assists in the establishment of muscular tone which promotes early return of venous flow.

In this series, 100 private cases of operations during the past 18 months were presented, 60 females and 40 males; the day of ambulation averaged 2.32 postoperatively. The average stay in the hospital was 9.2 days. In this series, there were three cases of pulmonary embolism, two cases of atelectasis, two cases of thrombophlebitis, and one case of phlebothrombosis. All operations were done under inhalation or spinal anesthesia; there were no deaths; follow-up in two to 18 months showed good condition existing.

The advantages are early wound healing, less vomiting and distension, early bowel and vasomotor tone, acceleration of convalescence, early work ability, and shorter hospitalization.

It should be remembered that this procedure is not the entire answer to the control of emboli and thrombosis, and that the cases must be selected.

DR. JOHN R. MERRIMAN ("The More Common Causes of Failure in Treatment of Varicose Veins") gave a very brief review of this subject, stating that the chief causes may be listed as improper technique; solutions for sclerosing; untimely or improper ligations; allergic reactions; improper selection of patients; and complications.

DR. HAROLD C. VORIS ("Diagnosis and Treatment of Head Injuries") stated that we still have the problem of the "closed" head injury, which occurs in by far the majority of instances.

One difficult problem is how to handle the head injury case which is accompanied by shock, and which has injuries elsewhere. The individual should be put to bed without delay and given supportive treatment. After stabilization, more definitive treatment can be outlined and done. Such cases should be seen early by expert persons. In the majority of instances, x-ray of the skull can be postponed. Selected cases need chemotherapy. In serious injuries, careful observation should be made for signs of extracerebral hemorrhage.

While young patients can be given modified dehydration measures, the older persons do not stand this procedure so well.

Spinal puncture should be considered a tool of diagnostic value in severely injured persons and can be performed eight to 12 hours after the injury; when the fluid is observed to be under pressure, 15 to 20 cc. may be removed, and this procedure has distinct therapeutic value; however, it should always be remembered that spinal puncture should be used cautiously.

No operation should be performed unless there is subdural or extradural hemorrhage or nasal rhinorrhea.

Statistics were presented on 2714 cases of head injuries, showing a gross mortality of 11%; the most important factor is age, except for the location of the trauma.

The trauma involved cases associated with face, chest or other injuries; those with associated diseases, such as alcoholism, cardiovascular disease, and lues; and those cases showing associated conditions found at necropsy, such as pneumonia, cardiovascular renal disease, meningitis, and lung abscess.

DR. CARLO SCUDERI ("Repair of Major Bone Defects with Massive Bone Grafts") presented a series of 94 cases in war casualties, involving compound fractures and sepa-

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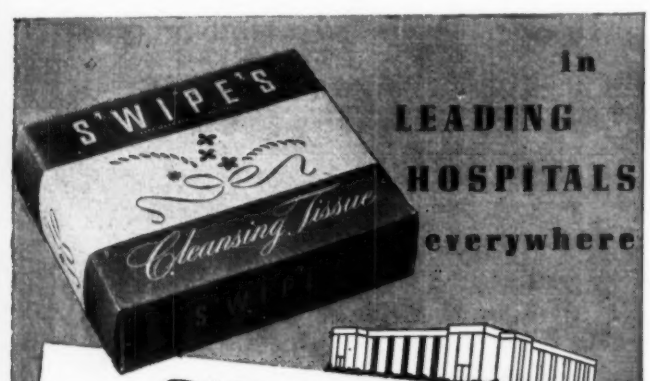

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rations after many months; in this series four cases were lost.

Emphasis was placed on meticulous pre-operative and post-operative care.

Certain principles were applied to all cases; no cases were operated having drainage up to a period of six months; no bone grafts were done in the presence of extensive scar tissue—good tissue well healed must be available; all cases received 90 grs. of sulphadiazine daily and 25 grams of penicillin hourly.

Important principles in the treatment of these cases were as follows:

1. Do large graft instead of a sliver—taking a wide piece at least ¼ in. wide and never smaller than ⅛ in.
2. Insure stability by using the crest of the bone.
3. Use fresh bone against fresh bone and cancellous tissue to cancellous tissue, as well as cortex to cortex.
4. Use long screws from cortex to cortex, which should protrude slightly. Use proper pilot hole, giving proper attention to the shank of the screw. One must get a good fit and good apposition.

Lantern slides were shown of fractures of both forearms, single bone of the forearm, humerus, both bones of the leg, and the femur.

In conclusion, the essayist stated that there was nothing original about the technique and again emphasized the necessity of having healthy tissue to work with at the time of operation.

DR. J. E. BELLAS ("Vesicovaginal Fistula") completed the program, giving a brief summary.

Five factors and procedures were mentioned as follows:

1. Time of operation—three months after subsidence of infection;
2. Adequate exposure—vaginal hernia and collar incision with use of purse-string sutures around collar incision;
3. Suturing of the paravaginal connective tissue;
4. Suturing of the vaginal mucosa;
5. Non-absorbable sutures are used—an indwelling catheter is sutured to the labium for 14 to 16 days—prophylactic doses of sulphadiazine are administered.

American Association of Industrial Physicians and Surgeons

—Meeting of the Board of Directors—
October 12, 1947

THE Board of Directors of the AMERICAN ASSOCIATION OF INDUSTRIAL PHYSICIANS AND SURGEONS met in the offices of the Association at 28 E. Jackson Blvd., Chicago, Illinois, on the above date.

Officers present were DRS. H. S. BROWN, H. A. VONACHEN, A. H. WHITTAKER, E. P. HELLER, F. W. SLOBE and E. C. HOLMBLAD. Directors present were DRS. E. H. CARLETON, M. H. MANSON, R. W. GRAHAM, E. A. IRVIN, and F. E. POOLE. Others present were DRS. H. H. RUBIN, and J. D. WILLEMS.

The Treasurer's report was presented and approved.

The Board elected the following to Fellowship in the Association: GLEN I. ALLEN, Peoria, Illinois; V. C. BAIRD, Houston, Texas; BENJAMIN BARZUNE, Eunice, New Mexico; JAMES A. CALLAHAN, Chicago; RICHARD L. HAAS, Dayton, Ohio; MELVIN L. HOLE, Danville, Illinois; and JOSEPH CHARLES JOHNSTON, Providence, Rhode Island. DR. VOLNEY S. CHENEY was elected to Honorary Membership.

The Managing Director's Report indicated a total Membership of 1839, including 56 who are still in Military Service.

PRESIDENT HENRY S. BROWN reported that he attended the joint meeting of the Industrial Medicine Associations of the Provinces of Quebec and Ontario held in Montreal on October 2, 3 and 4, 1947. This he did in the capacity of representative of our Association and was the dinner speaker of the evening, October 2.

The report of the 1947 Convention indicated a small balance after expenses, and this was divided among the participating organizations. There were 1281 registrants. These figures do not include the attendance of commercial or scientific exhibitors.

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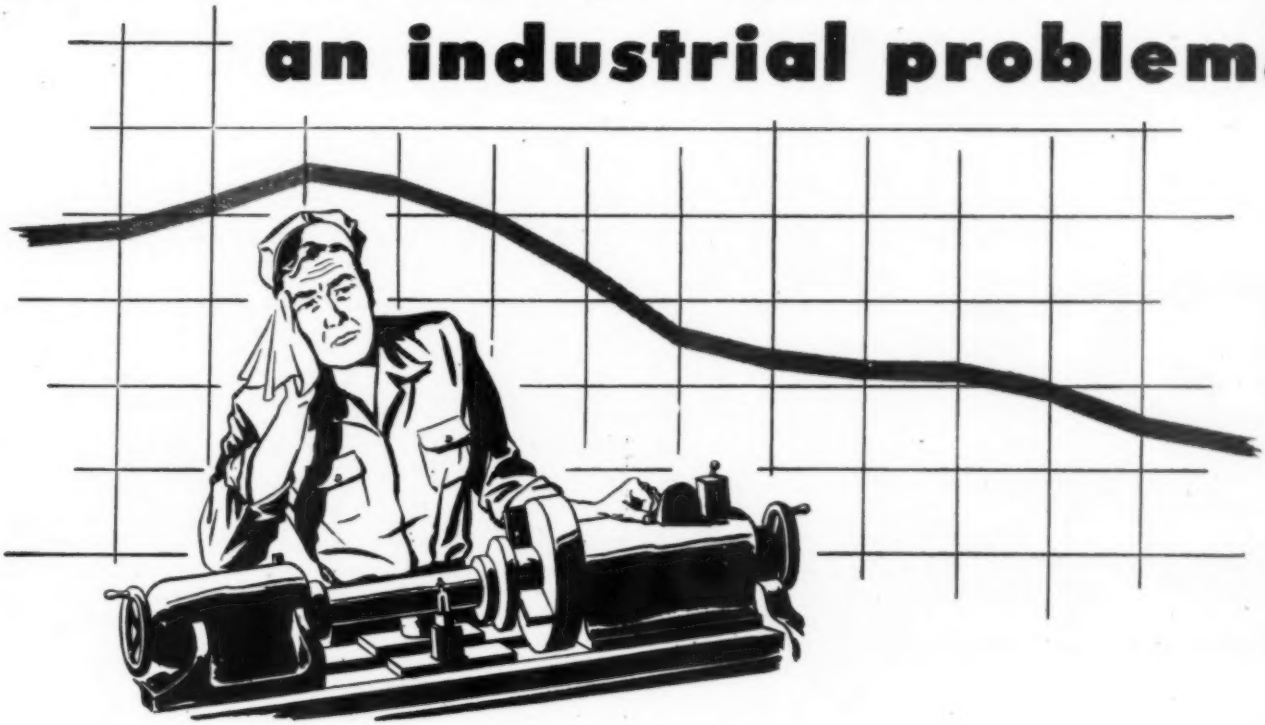

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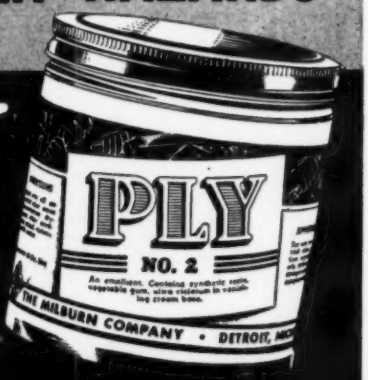

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Wherever unusual dermatitis problems are encountered our Research Staff may be consulted, without obligation. On these problems we approach them through laboratory, clinical and field analyses. Please write on your letterhead, giving pertinent facts on conditions you wish to rectify.

"The Answer to Industrial Dermatitis" will prove especially helpful to Safety Engineers, Plant Physicians and Nurses, Personnel Directors, and Works Managers.

PIONEERS IN RESEARCH FOR PREVENTION OF INDUSTRIAL DERMATITIS

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In the report of the 1948 Convention to be held in Boston, March 28 through April 4, 1948, DR. H. A. VONACHEN, Chairman, indicated that satisfactory progress was being made in the completion of plans. Hospital clinics will be held on Tuesday, March 30, 1948, DR. HENRY MARBLE, also conducting a clinic on the afternoon of that date.

The Board authorized expenditures for the publication of the Association Directory, not to exceed fifteen hundred dollars. The Directory will list all Fellows, Members, and Association Members geographically as well as alphabetically.

Reports of the various committees were received. The Membership Committee reported that 27 applicants were approved for full membership and three for associate membership. Two applicants were disapproved and one deferred pending the receipt of membership credentials in his County Medical Society.

The History Committee reports progress in its work on a History of Occupational Medicine to be published in book form within the next two years. This work will be divided into three sections. The first section by DR. WHITTAKER will cover antiquity and early occupational medicine, the second section by DR. GEIER, occupational medicine of the Colonies up to 1916, and the last section by DR. SHOUDY, the period from 1916 to the present time.

Preliminary reports outlining their work for the ensuing year were submitted by DR. RUBIN for the Publications and Editorial Committee and DR. WILLEMS for the Workmen's Compensation Committee. DR. CARLETON submitted his report from the Fund Raising Committee. DRS. WHITTAKER and GRAHAM gave Counsellor's Reports for their respective districts.

Several items of business were referred to the Executive Committee for action.

The meeting adjourned at 3:00 P.M. to enjoy a Fellowship Dinner at the Swedish Club.

The next Board of Director's meeting will probably be held during the Congress of Industrial Health at Cleveland, Ohio, January 5-6, 1948.

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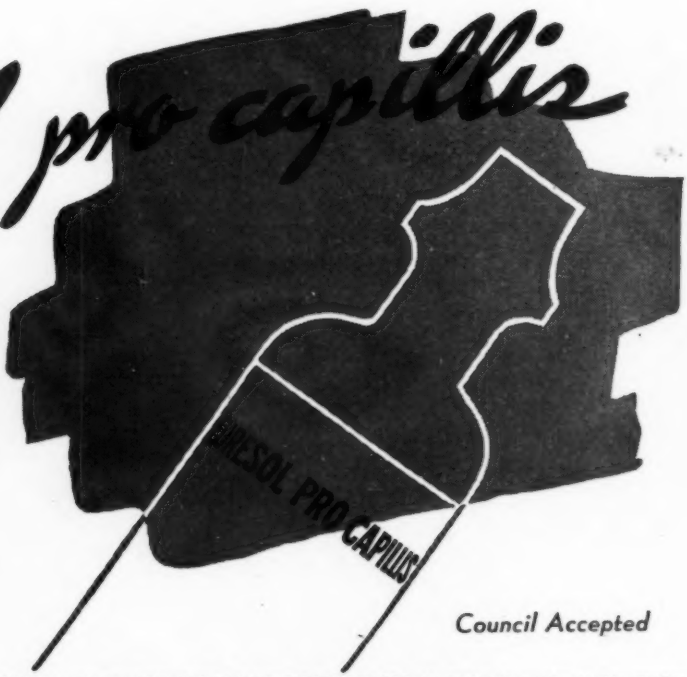

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NEW BOOKS

Problems of Mind and Heart

MEN AT WORK—THE SUPERVISOR AND HIS PEOPLE, by KEEVE BRODMAN, M.D. Foreword by HAROLD G. WOLFF, M.D.; illustrations by FRANCIS STROBEL. Cloth; 191 pp.; $2.50. Published by Cloud, Inc., Chicago.

HERE is a remarkable book—extraordinary for what it is, as well as what it contains. Among its numerous qualifications for this distinction is the fact that it throws the first really traversable bridge across a chasm which has heretofore yawned unspanned. On one side of this chasm were the supervisory people, fitted for their positions by knowledge and experience in the objective elements of production—methods, means, materials, processes, rates. On the other side were the employees, units in the productive set-up, but individuals, people, human beings, each with the intangible subjective mental and emotional constitution that makes every one a person in his own right. It is a characteristic of employees that when they come to work they bring their whole selves; the part that is concerned with skill and dexterity assumes the daily pattern, but the other part—well, it is the problems which arise from and because of the other part that constitute the chasm.

These problems have many roots—the inherently human, complicated by those originating in the fact and circumstances of the employment. The latter are, indeed, a complicating factor. As MCCORD puts it: "The industrial employee is highly vulnerable to the buffetings in his world . . . . he is beset by uncertainties, anxieties, insecurity, inferiority, phobias, neuroses, fear of not fitting into his group, fear that he may be disliked, a little insecure as to his job, uncertain about the attitude of his foreman toward him, disturbed by troubles at home . . . . his work world may be filled with noise, monotony, fatigue . . . . Deeply hidden in the average workman are lonesomeness and anxiety."

In short (as HARRY KING TOOTLE names his recent work) "*Employees Are People*"—which says a great deal. And, being people, their reactions to employment have, no

STATEMENT of the ownership, management, circulation, etc., required by the Act of Congress of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946, of Industrial Medicine, published monthly at Chicago, Illinois, for October 1, 1947. State of Illinois, County of Cook.—ss: Before me, a notary public in and for the State and county aforesaid, personally appeared A. D. Cloud, who, having been duly sworn according to law, deposes and says that he is the Publisher of Industrial Medicine and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily, weekly, semiweekly or triweekly newspaper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, as amended by the acts of March 3, 1933, and July 2, 1946 (section 537, Postal Laws and Regulations), to wit, (1) That the names and addresses of, the publisher, editor, managing editor, and business managers are: Publisher, A. D. Cloud, 533 Madison Street, Glencoe, Illinois; Editor, C. O. Sappington, M.D., 330 South Wells Street, Chicago, Illinois; Managing editor, none; Business manager, Stephen G. Halos, 605 North Michigan Avenue, Chicago, Illinois. (2) That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one percent or more of the total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) Industrial Medicine Publishing Company, 605 North Michigan Avenue, Chicago, Illinois; Charles Drueck, Jr., 55 East Washington Street, Chicago, Illinois; Stephen G. Halos, 605 North Michigan Avenue, Chicago, Illinois; A. D. Cloud, 533 Madison Street, Glencoe, Illinois. (3) That the known bondholders, mortgagees, and other security holders owning or holding 1% or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None. (4) That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company or trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him. (5) That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above. . . (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.) A. D. Cloud, Publisher. Sworn to and subscribed before me this 21st day of October, 1947. (Seal.) Lucille H. Gross. (My commission expires February 14, 1951.) Note.—This statement must be made in duplicate and both copies delivered by the publisher to the postmaster, who shall send one copy to the Third Assistant Postmaster General, Division of Newspaper and Periodical Mail, Washington 25, D. C., and retain the other in the files of the post office. The publisher must publish a copy of this statement in the second issue printed next after its filing.

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doubt, been just the same since men long ago first began to work. But it was not until rather recent times that anything was done about the fact that they *are* people, with their reactions often becoming real hazards. And not until the Cornell-Caterpillar Program had really studied the problems involved in this fact was anything accomplished that wasn't almost wholly directed *at* the supervisory staff in the usual stilted terms of "ought" and "should"—which didn't help too much in getting across the gap between, for example, the foreman's head and the employee's heart.

Stemming from the Cornell-Caterpillar Program, however, DR. BRODMAN, already well known to readers of INDUSTRIAL MEDICINE, develops a new approach. His protagonist is JOE, the FOREMAN. JOE is a composite of all the many thousands of foremen and supervisors in all kinds of industry; and the problems he faces—being here the human rather than the material—are typical of all kinds of employment. JOE doesn't relate how they ought to be solved. Instead he tells, in his own words, *how he solved them*, how he bridged the chasm. "Long skilled in the tangible terms of production, he manifests equal skill in the handling of his men in the intangible terms of their relations to each other and to their jobs." And therein lies the significance of this book, for it puts into every foreman's hands a tool, an instrument, which will enable him to become in practical fact what he has so often been called in book-and-article theory, "a first-line personnel director."

JOE'S problems and how he solves them need not be detailed here. Suffice it to say that he works out the answers with sincere respect for the dignity of the work, and for the essential human dignity of the workman. His tactful and thoughtful solutions must be read to be appreciated. And they will be appreciated, not alone for their specific circumstances, but as much for the unlimited scope of their connotations. A worried employee, for instance, may be quite as disturbed in one job as another; an "accident-prone" can have his accident in the office as readily as in the shop. All the episodes are interesting. Especially good is the incident where JOE borrows a big fellow's firsts to help a little fellow over some rough spots. Interesting, too, is the fact that such words as "psychiatry" and "psychology" are conspicuous by their absence from the text.

DR. BRODMAN'S "Men At Work," in addition to being a "first" in that, so far as the foreman or supervisor is concerned, it is entirely subjective—first person singular—has also the distinction of being "first" in another respect. It is, in fact, the first formal contribution from the field of industrial medicine to the field of personnel management. It had its genesis under DRS. VONACHEN, KRONENBERG and WEIDER, of the Caterpillar Medical Division, in association with DRS. MITTELMANN, BRODMAN and WOLFF, of Cornell University Medical College.

The book is well done in form. Large clear type, pleasing format, good paper, wide margins, strong binding all sustain the general excellence. Strobel's drawings add to the attractiveness.

"Men At Work" ought to be read by every foreman and supervisor in the country. The industrial executive in charge of Personnel or Employee Relations who will arrange to get it into the hands of all his supervisory people will not only considerably enhance their effectiveness but will also save himself a lot of headaches. It is a remarkable and timely book—undoubtedly the progenitor of many more of the same kind, but never to be superseded in the distinctions which make it the excellent book that it is.

Introduction to Industrial Medicine

INTRODUCTION TO INDUSTRIAL MEDICINE. Edited by T. LYLE HAZLETT, M.D. Price $3.00. Pp. 260, with 14 illustrations. Chicago: Industrial Medicine Publishing Company, 1947.

THE material of this book consists of nineteen lectures presented in the course on industrial medicine for undergraduates at the School of Medicine of the University of Pittsburgh. As far as this reviewer is aware this is the only published text on the subject designed for the undergraduate medical student. Fourteen contributors, highly competent specialists in their respective fields, are represented.

Four new lectures have been added in the present revision on the following subjects: minor injuries, eye injuries, personal respiratory protection and laboratory

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methods. An extremely valuable addition is an index which appears entirely adequate. The excellent bibliography of the earlier edition has been extended.

The coverage of the fundamentals of industrial medicine in the broad general sense is excellent, but rather too detailed for the undergraduate under the time limitations usually imposed by the ever crowded medical curriculum. On the other hand, these lectures will be valuable as future reference material. In fact, the volume should be helpful for physicians enrolled in short orientation or refresher courses in industrial medicine, and for engineers and chemists in relation to curriculums purely on industrial hygiene.

It is believed that the lecture entitled "The Industrial Medical Department" should lay greater stress on the functions of the plant physician aside from physical examinations. The lecture on gases, vapors, dust, fumes and mists could include to advantage schematic illustrations.

—E. W. BROWN, M.D., in *Occupational Medicine*, June, 1947.

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Occupational Diseases of the Skin

OCCUPATIONAL DISEASES OF THE SKIN, by LOUIS SCHWARTZ, M.D., LOUIS TULIPAN, M.D., and SAMUEL M. PECK, M.D., pp. 964, cloth, second edition, thoroughly revised, with 146 illustrations and a colored plate; published by Lea & Febiger, Philadelphia, 1947.

EIGHT years after its first publication this comprehensive text makes its appearance in a second, revised, enlarged edition. The basic pattern remained unchanged; the material is group in 47 chapters; two of which: (1) Occupational Acne (XVII) and (2) Medicolegal Aspects of Occupational Dermatitis (XLVI) are entirely new. The text has been increased by 164 pages; the number of illustrations by 30, with the addition of one color plate. The tabulation of substances used in patch testing was enlarged by 10 pages.

This second edition reflects the result of immense experience, based on material unique in extent and variety, all compiled with great diligence and assiduity. Mainly, it represents the life work of the senior author, who spent almost 30 years as chief, Office of Dermatology, Industrial Hygiene Division, U.S.P.H., a position, which gave him access to the widest possible information regarding industrial dermatoses. The first edition was a landmark in the American dermatological literature, since the world had previously possessed only two standard works on industrial dermatoses, the monumental work of Oppenheim, Rille and Ullmann (1922-26), in German, and R. Prosser White's great pioneer contribution "Dermatergoses," in English, the last edition of which was published in 1934. The new edition now under review assembles the additional knowledge and experience collected mainly during the dazzling industrial activities of World War II, and registers new chemicals and new methods of manufacture, which are potentially dangerous to the workers' skin.

The many highlights of this second edition, however, do not make up for the deficiencies which mar some of its most vital features. Take, for example, the illustrations. Among the 146 in black and white there is only one (Fig. 144) which would be acceptable at a minimum standard of medical illustrations. The rest without exception are far below any acceptable minimum standard. Photographs have to speak for themselves. The ones mentioned do not serve any didactic purpose—even with captions (which are often erroneous). Note, for instance, Figs. 8, 11, 13, 41, 42, 81, 94, 115, 141, which are completely without any texture, to mention only a few. Needless to say, illustrations in any dermatological text, and especially in one on industrial dermatoses, are of prime importance. Perfect photographs often tell the story better than the best description could do. The truth of this statement is borne out by the excellent black and white photographs in the works of Oppenheim, Rille and Ullmann, and of R. Prosser White. The authors' endeavor here to convey their observations through the medium of illustrations has to be considered much less than successful.

Beside this shortcoming there are grave errors in basic theoretical conceptions in many important parts of the book. The chapter on "Fungus Infections" (V, 64) underwent a substantial enlargement, much to the detriment of the content. The chimera of the "epidermophytid," and the "levuride" are repeated over and again without bringing in contrary evidence. The older contributions of Brocq, Sabouraud, Mozes Scholtz, the more recent results of research by C. Guy Lane et al., by Downing, by this reviewer, are completely omitted. The authors speak of the "experimental reproduction of the syndrome of dermatophytosis of the feet in humans," without revealing that the claim of the junior author in this respect has no foundation at all. Too much space is also taken up by the discussion of the trichophytin reaction, the specificity of which is highly emphasized. Here again the authors omit facts presented by others during the last 40 years, disproving the diagnostic value of this agent. Among the complete criteria of the "id" eruption, the requirement of positive blood culture is mentioned. With reference to "levurides" they omit to note that there is not a single finding on record that "monilias," in the presence of "id" eruptions of the hands and feet, would ever had been cultured from the blood stream.

The most serious errors and shortcomings, however, are incorporated in the chapter (XLI) on occupational dermatoses from mycotic infections. The authors appear to feel insecure in treating this subject. The differential diagnosis between the so-called "dermatophytid" and contact dermatitis is unsatisfactory. Evidence which shows that in 60 to 80% of the cases no fungi whatsoever can be found in the lesions, no matter how they are studied, is again omitted. The facts presented by Hopkins et al., Andrews, C. Guy Lane et al., and by this reviewer are not even mentioned, let alone discussed. Inconsistencies are numerous and most disturbing. Under "Yeast Infections" (p. 641) Gilchrist's blastomycosis is referred to, and it is stated that the human form was first studied in 1893 by Carozzi. The well-informed reader knows that the American blastomycosis was discovered and first described by Gilchrist in 1896. The causative organism is not a "yeast-like" organism as stated, but a hyphomycete. Chromoblastomycosis,

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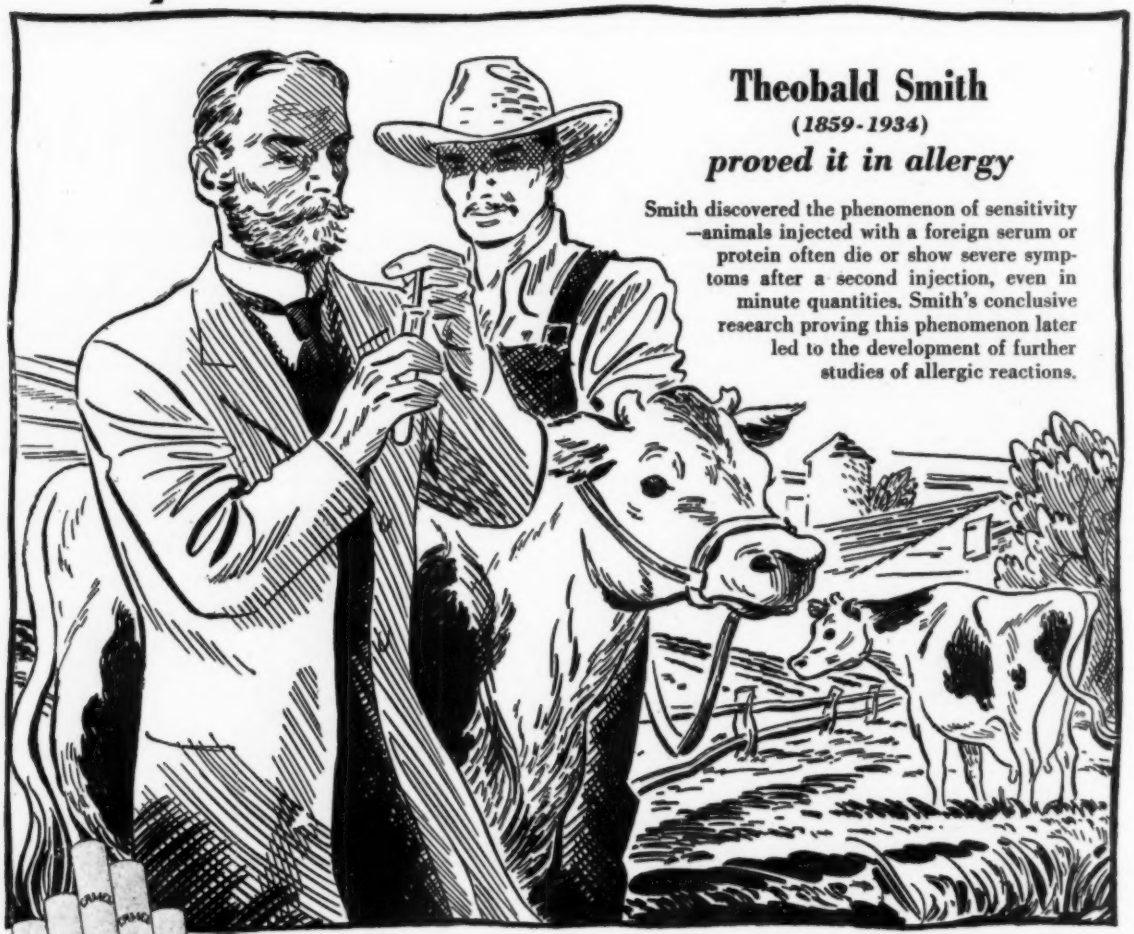

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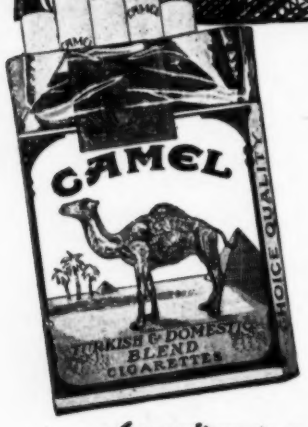

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coccidioidal granuloma, sporotrichosis, nocardiosis, actinomycosis are presented as "yeast infections."

The chapter on "Occupational Diseases of the Nails" is far behind the level of present-day research in this field. A clear concept of the etiology and pathogenesis of the nail involvement is completely missing. Onychia and paronychia are attributed to bacteria, fungi, monilia, and yeasts. A dynamic insight into the important pathology of the nail involvement and critical evaluation of the many different, implicated micro-organisms is also lacking.

The presentation of the medicolegal aspects of differential diagnosis concerning fungus infections and contact types of occupational dermatitis will need much clarification in the light of results of modern research.

From the technical standpoint—excellent format, fine glossy stock—the text is satisfactory. The reviewer greatly missed an index of authors. This certainly would have enhanced the value of the work. The bibliography is exhaustive, reaching the goal of a reference compendium.

Despite the serious shortcomings, the authors present so immense a material that the book, just on this account, should have its place in the hands of dermatologists and industrial physicians.

The reviewer warmly hopes that a third edition, in the not too distant future, in eliminating the shortcomings of this second one, will make this work the American monument in industrial dermatoses.

—TIBOR BENEDEK, M.D.

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Central States Meeting

DR. ROBERT M. GRAHAM, President of the Central States Society of Industrial Medicine and Surgery, with approval of Program Chairman, JAMES J. CALLAHAN and members of the Board of Governors, has accepted the invitation of the AMERICAN ASSOCIATION OF RAILWAY SURGEONS to meet jointly with them at their 58th Annual Meeting, Sunday, Monday and Tuesday, November 23, 24 and 25, 1947, Palmer House, Chicago. The three-day scientific program, covering "Latest Developments in Railway Medicine and Surgery," is so closely akin to industrial medicine and surgery that it is believed the membership of the CENTRAL STATES SOCIETY will show their interest and appreciation by arranging to attend the three-day sessions in greater numbers than under the customary one-day Mid-Winter session, as heretofore. The program topics will be presented by outstanding men in the field of traumatic surgery.

DR. GEORGE F. LULL, secretary-general manager of the AMA, told the committee (House Foreign Affairs Sub-committee) that organized medicine favors American participation in the WHO (World Health Organization) as long as it refrains from suggesting socio-economic changes in American practice.

—*Medical Economics*, October, 1947.

A "REPORT on Beryllium" from the recent Saranac Lake Symposium features the November meeting of the Chicago Section of the AMERICAN

INDUSTRIAL HYGIENE ASSOCIATION, on the 24th, at the rooms of the Electric Association, Civic Opera Building.

Women!

MEN are neater than women. At least when traveling. The way some women mess up ash trays and smoking stands on railroad trains is nothing short of revolting. In addition to tossing lip-stick stained cigaret butts on the tray or stand, they tear up letters and pile the little pieces on top of the butts. I have noted it reported a number of times that women's rest rooms are horrible places to behold. Yet most of the women who mess up public places probably are dust-daffy damsels at home, always picking on their loving husbands for dropping ashes on the floor or leaving the bathroom in an untidy state.

—E. V. DURLING, "On the Side," in *Chicago Herald-American*, October 15, 1947.

Working Conditions

VACATIONS with pay are a common practice in "Working Conditions of Public-Health Nurses." There are about 20,000 persons engaged in this profession in the country. In October, 1946, they earned, on the average, $184 a month; about 25% earned at least $50 a week. Most nurses' work schedules did not exceed an eight-hour day or 40-hour week. Practically all public-health nurses could expect paid vacations and sick leave. About 40% were covered by some type of pension or retirement plan. The public-health nurses themselves, while expressing less dissatisfaction with their work than other types of nurses, did complain about limited opportunities for promotion, rates and methods of awarding increases in pay, and lack of security against unemployment.

—*Monthly Labor Review*, September, 1947.

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Draft Statistics

PITTSBURGH reports "the official tabulation of the statistics coming from the Surgeon General's office on the 5,000,000 men between the ages of 18 and 37 whom the draft boards during World War II classified as 4F's":

500,000	never examined because of evident mental or physical defects.
676,000	rejected because of deficient intelligence.
10,000	rejected because they were morons or idiots.
856,000	rejected because of neuropsychiatric shortcomings.
376,000	disqualified with physical defects such as hunchbacks, amputations, etc.
65,700	rejected for flat and club feet.
317,500	rejected because of heart trouble.
260,200	disqualified for hernia.
245,400	rejected because of nerve injuries, resulting from infantile paralysis, etc.
234,300	rejected for bad eyesight.
189,700	rejected for defective hearing.
129,900	rejected because of tuberculosis.
64,700	rejected for kidney weakness, enuresis, etc.
65,700	rejected for gastro-intestinal illness.
48,200	rejected for varicose veins.
45,300	rejected for gland defects.
19,300	rejected for hemorrhoids.
254,000	rejected for syphilis.
18,400	rejected for venereal disease other than syphilis.
15,000	seriously underweight.
10,000	greatly overweight.

—*J. Indiana State M.A.*, October, 1947.

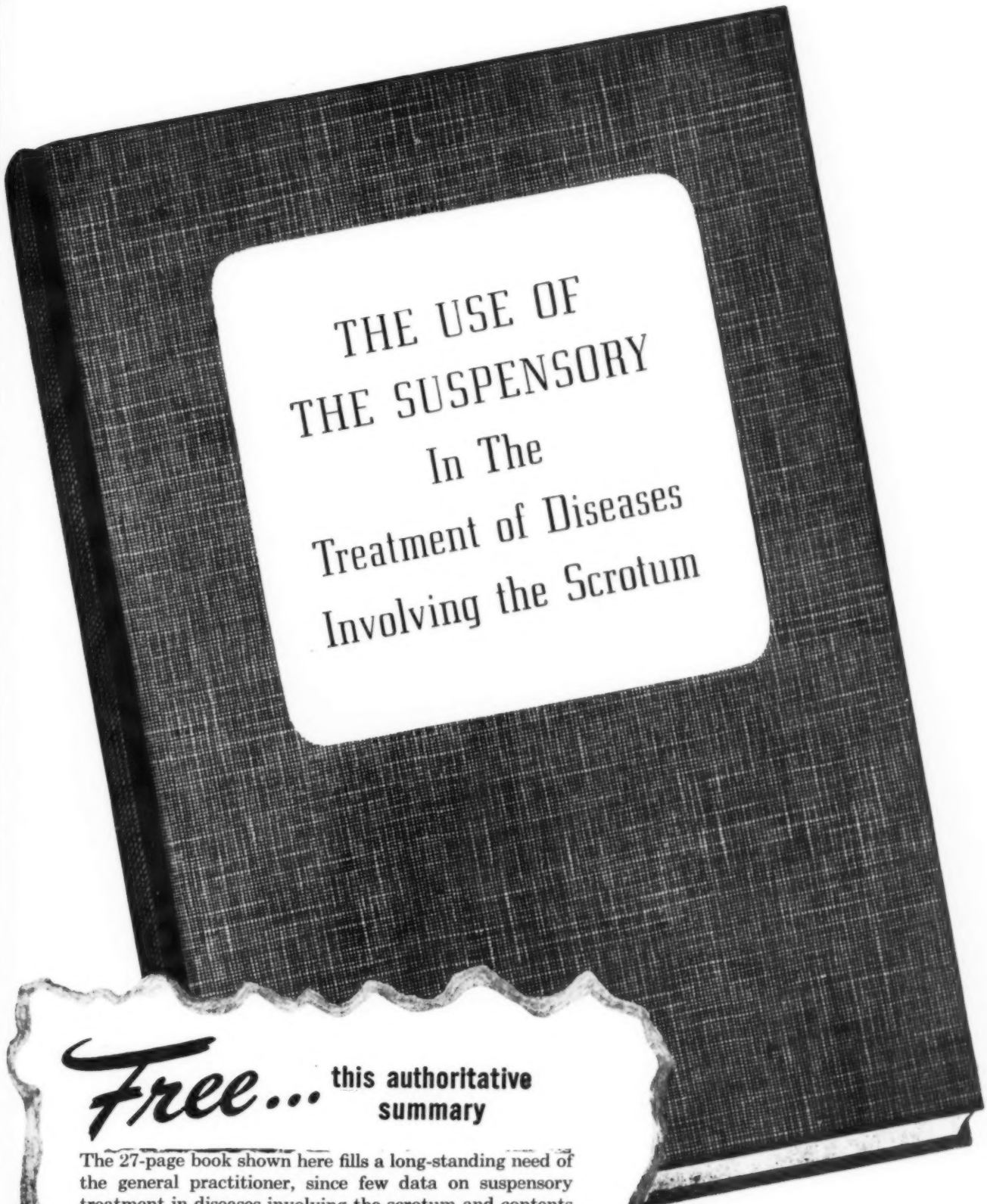
ILGWU Health Center

INTERNATIONAL Ladies Garment Workers Union has begun a $1,000,000 expansion project for its Union Health Center in New York, according to Dr. Leo Price, Director. Half completed at present, construction and installation work is expected to be finished by next summer. The center, the largest ambulatory clinic in New York City with the exception of Presbyterian Hospital, is increasing its floor space from a floor and a half in the 27-story Lefcourt Building — purchased by the union for $2,500,000 two years ago — to five floors. The expansion of the center, which has been in existence for members of the union since 1913, is the result of the agreement reached in 1944 between the garment industry and the ILGWU by which 3.5% of the total payroll was to be turned over to the union for the establishment of a health and welfare fund. Sick benefits, hospitalization, vacations and other benefits were to come out of the fund, which last year in New York City alone collected about $10,000,000. At present an estimated 2,000,000 in various unions under collective bargaining now have health and benefit programs, with John L. Lewis' coal miners most notable among this group. Many of these unions are considering supplying their own medical service. The union clinic has a staff of 10 full-time physicians, 110 visiting doctors, 35 nurses, 30 technicians, five pharmacists and 200 lay employees. Besides the Union Health Center here, which covers the 160,000 New York City members, ILGWU clinics have been set up in Philadelphia and Fall River, Massachusetts . . . while others are being established in Boston, Allentown and Wilkes-Barre.

—*New York Times*, October 14, 1947, quoted in *Industrial Hygiene Digest*, October, 1947.

BARNEY J. HEIN, M.D., Toledo; Toledo Medical College, 1912; aged 58; died August 17; member of the Ohio State Medical Association; fellow of the American Medical Association; diplomate, American Board of Orthopedic Surgery; member, Clinical Orthopedic Society; member of the American Academy of Orthopedic Surgeons; and fellow of the American College of Surgeons. Long active in the field of medical organization, DR. HEIN was President of the Ohio State Medical Association in 1938-1939. Previous to his election as president-elect in 1937, he had served three consecutive terms as Fourth District Councilor, in which position he was active on special committees on workmen's compensation questions and as chairman of the Committee on Auditing and Appropriations. At the time of his death, DR. HEIN was chairman of the Committee on Public Relations and Economics, an office which he had held continuously since 1940, and was a member and former chairman of the Committee on Industrial Health and Workmen's Compensation. Active in the organization of Ohio Medical Indemnity, Inc., the Association's pre-payment medical care plan, he was a member of its board of directors. He had served for the past eight years as a delegate to the American Medical Association, and was again elected for a two-year term in May. He was president of the Academy of Medicine of Toledo and Lucas County in 1930. Widely known as an orthopedic surgeon, he had contributed a great deal in the field of bone surgery as author of a number of medical papers on the subject. Active in the field of athletic and industrial accident injuries, he served as surgeon for eight industrial plants, and was director of the orthopedic staff at St. Vincent's Hospital, and member of the orthopedic staffs at Toledo, Flower, Riverside, and Lucas County General Hospitals. While a student, DR. HEIN played on Toledo College's first baseball team. After graduation from the medical college of that institution, he took postgraduate work at Harvard Medical School, and New York Post Graduate Medical School.

—*Ohio State Med. J.*, September, 1947.



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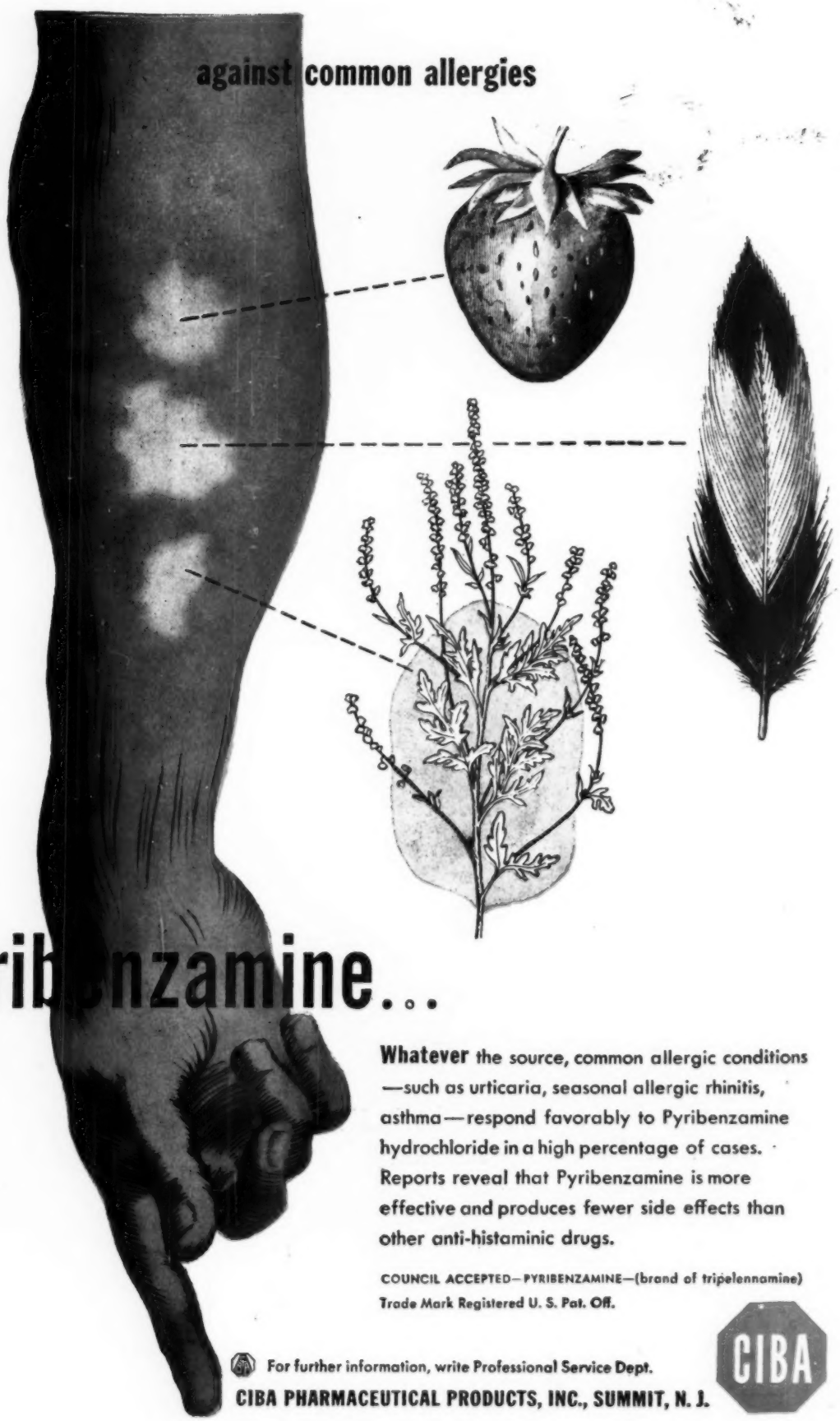

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